

**Children and Information Communication Technologies in the
Media: a study using Moral Panic Theory.**

Stacey Card

Bachelor of Education

Submitted in fulfilment of the requirement for the degree of
Master of Education (Research)

Centre for Learning Innovation

Faculty of Education

Queensland University of Technology

2013

Keywords

Moral panic, Information Communication Technologies (ICT), digital media, newspapers, internet, computers, children, parental supervision, education, content analysis, discourse analyse.

ABSTRACT

The impact of Information Communication Technologies (ICT) on society has been widely discussed in both academic and public debates. Recent attention has focused on children, and their ICT use. This thesis is an investigation of the media's representation of children and ICT. The study draws on moral panic theory and Queensland newspaper media, to identify the impact of newspaper reporting on the public's perceptions of young people and ICT. A discourse analysis, using content analysis as a theoretical perspective, was conducted of Queensland newspaper articles between June 2011 to June 2012 to uncover how media attention on children and ICT is represented to the public. Through the use of content analysis a comparison was conducted of reporting styles used by the media to report on ICT in general, compared to ICT and children. There was a significant increase in both the sensationalised and stylised representations of ICT in reporting used in articles addressing children and ICT. This was displayed through a significant increase in the negative representation of ICT and the intensification of suggested social controls measures for children. The sensationalised and destructively stylised representations of ICT and children have the potential to negatively impact on the public perceptions of children and their ICT use. This study draws on moral panic theory to better understand the implications of collective perceptions. It is suggested that the negative sensationalised news reporting of ICT and children creates an unrealistic fear of ICT and the internet to the public, consequently resulting in a moral panic. These findings will contribute to future research into public perceptions and policy development around ICT and children.

Table of Contents

Keywords	1
ABSTRACT.....	2
Statement of Original Authorship.....	5
Acknowledgements.....	6
Chapter 1: Introduction	7
1.1 Information Communication Technologies	7
1.2 Moral Panic.....	11
1.3 Research Aim and Questions.....	12
1.4 Scope of Research.....	13
1.5 Research Design.....	14
1.6 Expected Outcomes	15
1.7 Summary.....	15
Chapter 2: Literature Review.....	16
2.1 ICT Integration within a Child Context.....	16
2.2 Parental Supervision of Children's ICT use	18
2.3 Social Emotional Benefits of ICT.....	21
2.4 The Role of Information Communication Technologies in Education.....	23
2.5 Perceived Potential Risks Associated with ICT.....	28
2.5.1 <i>Exposure to Inappropriate Material</i>	28
2.5.2 <i>Cyber bullying</i>	29
2.5.3 <i>Risk Associated with Social Networking Sites (SNS)</i>	31
2.5.4 <i>Disclosure of Sensitive Material</i>	31
2.5.5 <i>Vulnerability to predators</i>	32
2.5.6 <i>Pathological internet use</i>	33
2.5.7 <i>Summary of Perceived Potential risks</i>	34
2.6 Influences of Parental Supervision	36
2.7 Phenomenon of Moral Panic.....	40
2.8 Four stages of Moral Panic	40
2.9 Three Theories of Moral Panic	43
2.10 Moral Panic and the Media	44
2.11 Summary	46
Chapter 3: Methodology.....	47
3.1 Conceptual Framework.....	47
3.2 Method of Analysis.....	50
3.3 Sampling	53
3.4 The Method of Investigation.....	53
3.4.1 <i>Moral Panic</i>	54
3.5 Key variables descriptors.....	55
3.5.1 <i>Themes</i>	55

3.5.2 Control Group	58
3.5.3 Persuasive tone and Sub-categories	58
3.5.4 Culture of Social Control	59
3.6 Summary	62
Chapter 4: Results and Analysis.....	63
4.1 Representation of Information Communication Technologies.....	64
4.1.1 Themes	64
4.1.2 Persuasive tone and Sub-categories of Articles	67
4.2 Decontextualization of Articles	73
4.3 Analysis of culture of social control	79
4.4 Four Stages of Moral Panic and Results	89
4.4.1 The warning stage	90
4.4.2 The impact stage	92
4.4.3 The inventory stage	93
4.4.4 The reaction stage	94
4.5 Summary	97
Chapter 5: Conclusions	99
5.1 Review of research aim.....	99
5.2 Theoretical Implications	104
5.3 Limitations	105
5.4 Implications for future research:	106
5.5 Conclusions.....	107
References.....	109
Appendix A.....	121
Grieving parents warn of deadly internet fad	121
Appendix B.....	123
KIDS CORRUPTED IN SMUT- PHONE AGE- Primary children viewing sex films	123
Appendix C	126
Web crims target kids - Identity details stolen from social networks.....	126
Appendix D.....	127
LOADED LAMENT - Lads' mag boss 'sorry' for porn.....	127

Statement of Original Authorship

The work contained in this thesis has not been previously submitted to meet requirements for an award at this or any other higher education institution. To the best of my knowledge and belief, the thesis contains no material previously published or written by another person except where due reference is made.

Signature: QUT Verified Signature _____

Date: 12/12/13

Acknowledgements

There are many people to acknowledge for their support, patience and belief of my ability to complete this Master's Thesis. I would like to thank my supervisors Gordon and Jo. Gordon and Jo you have both been so generous with your professional knowledge, time and understanding. Thank you for your wisdom, support and guidance through my journey.

Special thanks are extended to the teaching and Administration staff of Narangba Valley High State School, where I have taught for the last 5 years, without your support and encouragement this thesis would not be possible.

To my friends and colleagues thank you for listening when and I needed to talk and leaving me alone when I needed time. To Kristy that encouraged me to stay the course; I am so appreciative of your friendship and kind words of encouragement.

To my wonderful family who bring me luck, love and happiness, particularly in times of need. You have understood when I locked myself away, for what seemed like days and you have hauled me away from my work when I needed time off. To Wesley, thank you for being the best son in the world, you always make me smile and Sidney, my little pug, who was my constant companion. Finally, to Shane, my husband, you have believed in me even when I didn't, thank you.

Chapter 1: Introduction

This investigation examines the Queensland newspaper media's representation of children and ICT to the public. Section 1.1 provides background information on the suggested risks and potential benefits associated with Information Communication Technologies. This discussion is followed by a definition and historical look at Moral Panic theory in section 1.2. A summary of research aims and research questions can be located in section 1.3. Sections 1.4 and 1.5 provide information on the scope of this research and the research design chosen, which are discussed in more detail in chapter three. Section 1.6 finishes with information on the expected outcomes and significance of the research.

1.1 Information Communication Technologies

According to Australian Bureau of Statistics (2010), there are 9.6 million active home internet users in Australia, with a continually growing proportion of homes with internet access. The internet was initially designed to connect separate networks, allowing them to communicate with each other. What occurred was a super framework of networks that could store and transmit digital media almost instantaneously allowing all linked systems to communicate with each other (Castells, 2001). Over the last 40 years, information communication technologies (ICT) have become more powerful, less expensive, smaller and convenient. ICT and their risk and benefits have attracted large amounts of attention. The ICT phenomenon is now a fundamental part of society and has changed the way individuals pay bills, send mail, chat, play games, buy and sell items, and connect with friends. This has created both new opportunities and new concerns for society.

There has been much media discussion relating to the benefits and risks associated with ICT, digital media and children. For the purpose of this study, the term children relates to all young people between the ages of 5 years and 17 years of age. It is a common belief that children are at risks from ICT and digital media as they lack the knowledge and skills to

safely navigate through this new digital world. The internet is often portrayed as an infiltration device that provides no safe place for anyone to hide “even in the privacy of their own home or bedroom” (Courier Mail, 2012, Mar. 6, p. 36). However the educational benefits are also widely emphasised through the media, with ICT being credited with the creation of new innovative learning experiences in education (Courier Mail, 2007, Jul. 17, p. 44) and the suggestions for a much needed push for computers and internet access for young people in every classroom (Courier Mail, 2006, May. 5, p. 44).

This conflicting discourse leads individuals to believe that while ICT can put children at risk, they also provide much needed, unparalleled educational opportunities. Adding to the confusion is a growing body of empirical research suggesting ICT create enormous benefits for their users. For example, ICT use has been linked to positive connections to social involvement and increased wellbeing (Kraut, Kiesler, Boneva, Cummings, Henderson, & Crawford, 2002). Educational researchers have also seen benefits of ICT for students. ICT are now believed to be critical for educational and career success; having the skills to efficiently and effectively use ICT is now paramount for children to succeed (Hargittai & Shafer, 2006). ICT have shown to improve student motivation (MacDonald, 2008), increase collaboration between students and allow for greater differentiation in the classrooms (Balanskat, Blamire & Kefala, 2006). Students who perceived the internet as a technological tool had higher order cognitive skills (Chin-Chung, 2007).

There is, however documented concern about the safety and negative effects of digital media and the internet, particularly with young people (McColgan & Giardino, 2005; Puazon-Zazik & Park, 2010). These concerns relate to online harassment (Wolak, Finkelhor & Mitchell, 2004), cyber bullying (O'Reilly & O'Neil, 2008) behavioural problems (Mikani, Szwedo, Allen, Evans & Hare, 2010), access to inappropriate material (Wolak, Finkelhor & Mitchell, 2004), social networking sites (Moreno, 2010) and links between depression and internet addiction (Ha, Kim, Bae, Bae, Kim, Sim, Lyoon & Cho, 2007). It is easy to see that these conflicting messages to the public can be misleading and confusing.

Public concern over children's use of ICT is not recent. Since the internet's development people have been interested on the effects for users. More recently, there has been growing interest in how to increase the benefits and reduce the risks. Many safeguards are suggested to parents and educators such as strict regulation, filtering devices and school-led programs. It is suggested that schools must play a leading role in ensuring young people know how to use the internet in a safe and appropriate manner. Bhat (2008) recommends that some classroom based programs, which teach social-emotional skills which reduce aggressive and impulsive behaviours are needed. However, there is little research to support their effectiveness.

With the increased availability of ICT and the high number of home users a new area of research and discussion is investigating children's home ICT use and parents' role in reducing associated risks, through ICT supervision. Family factors, particularly parental supervision, can play a role in mitigating risk (Chien-Hsin, Shong-Lin, Li & Chin-Pi, 2009) however the findings are complex. Research investigations into parent supervision of children's ICT use are suggesting that parents commonly choose ineffective supervision techniques and have been found to promote rather than reduce risk taking behaviours. These include monitoring filters (Wang, Bianchi & Raley, 2005; Livingstone & Helsper, 2008); ICT surveillance and strict rules (Livingstone & Helsper, 2008; Van den Eijnden, et.al, 2010). Strict parental rules have been linked with the increase of problem behaviour on the internet (Van den Eijnden, et.al, 2010) and monitoring software is believed to be ineffective in safe guarding young people (Bryant & Bryant, 2005; Bamford, 2004; Cottrell, Xiaoming, Harris, D'Alessandri & Atkins, 2003).

Misguided concerns and fictitious issues reported in the media over ICT risks and educational benefits for young people can create anxiety for parents, leaving them unsure how to best support their children and with whom the responsibility lays. Negative stereotypical and stylized representations of children's ICT use can create self-fulfilling prophesies which escalate social fear. Nervousness about the internet has resulted in the formation of a new socially constructed 'folk devil' (Cohen, 2002). Misinformation and misdirection to parents

through the stylized and stereotypical reporting can cause reactions and social controls which detract from the real issues surrounding children and their ICT behaviours, putting children in greater risk.

There is a need to investigate the media's representation of these new technologies and ask whether a new 'moral panic' around children and ICT has been created and fuelled by the media. 'Moral Panic' is a sociological concept that aims to explain an overreaction to a perceived social problem (Rohloff & Wright, 2010). Defined by Johansson (2000), moral panic is a campaign against a perceived evil created by certain pressure groups, magnified and distorted by elements of the press. The media acts as a focusing device, framing attention to certain events and individuals (Johansson, 2000). The media's influence on moral panic theory will be investigated in more detail in section 2.11.

ICT have become fundamental aspects of our society and ICT have many benefits to users. Nevertheless, there are risks associated with ICT and all users should be savvy whilst using these new technologies. Actions should be taken to safeguard children and research suggests that parental engagement has been identified as a protective factor for mitigating risks to children (Heim, et.al, 2007; Livingstone & Helsper, 2008; Van den Eijnden, et.al, 2010). The focus of this research, however, is how ICT are portrayed in the media as this may lead to ineffective or inappropriate parental and education responses.

There has been significant research into ICT and the risk and benefits associated. However, more recent research has focused on children's ICT use and, more specifically, parent's influences on children's ICT use. Nevertheless there has been little research conducted on how ICT, are portrayed to parents and the public as a moral panic around ICT and children may lead to inappropriate/ineffective responses. Based on this concern, this investigation aims to discover how the Queensland newspaper media portrays children's ICT use to determine if a moral panic has been created and fuelled by the media.

1.2 Moral Panic

The term ‘moral panic’ was derived from a sociological concept, in the 1960s-1970s, that sought to explain a particular type of overreaction to a perceived social problem. An influential study by Cohen (1980) *Folk Devils and Moral Panics: the Creation of the Mods and Rockers* was revolutionary in the construction of youth culture research and, above all, defined the construction of images of youth and deviance. Cohen’s work was based on the media-produced fear and anxiety around a group of young people known as ‘Mods’ and ‘Rockers’ in the 1960s, who were believed by certain groups to be inciting violent episodes. The violence was few and far between. However the panic led to the public questioning the direction of ‘modern youth’. Cohen examined the public’s reaction to these perceived threats to societal norms, breaking it into phases and defining the concept of moral panic as:

A condition, episode, person or group of persons emerges to become defined as a threat to societal values and interests; its nature is presented in a stylized and stereotypical fashion by the mass media; the moral barricades are manned by editors, bishops, politicians and other right-thinking people; socially accredited experts pronounce their diagnoses and solutions; ways of coping are evolved or (more often) resorted to; the condition then disappears, submerges or deteriorates and becomes more invisible. (Cohen, 1980, p. 9)

The moral panic concept was initially a social critique, where panics were characterised as social reactions identified as irrational and essentially misguided (Rohloff & Wright, 2010). Thompson (1998) depicts the phenomenon of a moral panic first as a campaign (crusade) that must develop over a timeframe. Second, it must appeal to individuals who are alarmed by an apparent fracturing or breakdown of social order, leaving them at risk in some way. The threats and perpetrators are known as ‘folk devils’. Third, the moral guidelines are unclear. Fourth, the presence of politicians and right-thinking people, whom Becker (1966) named ‘moral entrepreneurs’ and also known as ‘claim-makers’, must voice and lead a media driven

campaign eager to take action that they maintain will suppress the threat. However, the real cause and issues of social breakdown remain unaddressed.

Early moral panics research tended to concentrate on single groups of individuals - including unwed mothers and young people who went to coffee bars; however contemporary panics involves larger groups of individuals. For example, child abuse panics appear to question the very institution of family, and the physical relationships between fathers and children (Thompson, 1998). The concept of moral panic has been extensively studied and replicated many times, from single mothers on welfare (Ajzenstadt, 2009); binge drinking (Frost & Gardiner, 2005); the construction of Attention Deficit-Hyperactivity Disorder and the appeal to medicate children with Ritalin (Miller, 2003) to the under achievement of boys in school exams (Smith, 2010). The theory of moral panic is appropriate to explore in this study given the high level of conflicting discourse and the perceived amount of negative media attention over ICT use and children. This important concept will be discussed in greater detail in the literature review.

1.3 Research Aim and Questions

This study aims to make a small contribution to understanding how ICT are represented by Queensland newspapers and to determine whether moral panic has developed around children and ICT. Discourse analysis will be used to discover if a moral panic has been created and fuelled by Queensland newspaper media.

Therefore, the aim of this investigation is:

To determine, using discourse analysis, how ICT and children are being represented in the Queensland newspaper media, and to determine if a moral panic has developed around children and ICT.

This study addresses the following question:

How do Queensland newspaper media represent ICT and children?

To address this question, the research investigates how children's ICT use is being represented to the public by popular media over a 12 month period. Although numerous studies have shown both benefits and risks to ICT use, as well as the effectiveness and shortcomings of parental supervision, little is known on how the media presents information regarding ICT use in children – a factor that is likely to influence whether and how parents and education providers educate children about the risks. Therefore, this thesis will focus on exploring the discourse of Queensland newspaper media on children's ICT use to ascertain if a moral panic has been fuelled by Queensland media around children and ICT. The following sub questions will be addressed through the research.

Sub question 1: To what extent does the media represent children's internet and ICT use in a stylized stereotypical manner?

Sub question 2: To what extent does the media suggest heightened controls as a response to children and their ICT use?

Sub question 3: What is the nature of the moral panic developed around children and ICT?

1.4 Scope of Research

As this research focuses on the Queensland's newspaper media's, representation of ICT and children, Queensland's capital city's two local newspapers, The Courier Mail and The Sunday Mail were chosen. Articles related to ICT between June 2011 and June 2012 were analysed. Not included in this investigation were any other free local newspapers throughout Queensland or any other form of media representation nationally. This discussion was due to

the aim of the investigation being specific to Queensland newspaper media's representation of children and ICT. Furthermore, it was deemed beyond the scope of this thesis to collate all Queensland's available newspaper resources so the search concentrated on the state's two main newspapers with the widest readership.

1.5 Research Design

The following theoretical framework and methodology was used to achieve the aim of the researched questions described above. The framework is discussed in more detail in chapter three.

Moral panic theory, first developed by Cohen (1980) and now commonly associated with Goode and Ben-Yehuda (2010) and Thompson (1998), will be used predominantly throughout this research to explain the implications of collective perceptions. In addition Cohen's (2002) '4 stages of a moral panic' model will be used to investigate if a moral panic has been created and fuelled by the Queensland newspaper media on ICT and children.

A mixed method content analysis using both manifest and latent content was used to explore all relevant articles during the time period. A comparison of ICT reporting styles of ICT pertaining to children, as distinct from ICT in general will be conducted, illuminating differences in reporting styles in the media. This approach will provide important insights into how ICT and children are represented to the public, and will be discussed in more detail in section 3.2.

1.6 Expected Outcomes

The expectation of this research is to provide an insight into the public perceptions of ICT, through the discourses used in newspaper media articles, determining the appearance and continuance of a moral panic on ICT and children. Additionally, this research will show if the public can gain a clear understanding of associated risks and benefits ICT have for children through the Queensland newspaper media's discourse. However, the most important outcome of this research is to identify if a moral panic around children and ICT has been created and fuelled by the media. This outcome is important as the presence of a moral panic can influence the public's perceptions of ICT and children, impacting on children's access to ICT, supervision techniques used by parents and the validity of developing Governmental programs used to safeguard children. Whilst there has been considerable research into the risks and benefits ICT have on children, discussed in further detail in chapter two, research on public's perceptions have been limited. This research will significantly contribute to the understanding of public's perceptions of ICT and children.

1.7 Summary

Most innovations bring with them various discourses that have an impact on perceptions and the rate of uptake of the innovation. However ICT, by their very nature, create unparalleled social and educational benefits whilst also creating grave concerns of the negative effects and heightened risks associated with them. This opening chapter has introduced moral panic theory and provided a summary of the research investigation, the research aim, research questions, research design and methodological approach used in the investigation. The next chapter reviews the literature related to: (a) ICT integration within a child context, (b) parental supervision of children's ICT use, (c) social emotional benefits of ICT, (d) the role of ICT in education, (e) perceived potential risk associated with ICT and (f) the phenomenon of moral panic, providing a theoretical base for this study.

Chapter 2: Literature Review

This section aims to examine ICT through social and educational perspectives. Section 2.1 leads with background information on children and ICT use. Followed by a review of parental supervision of children's ICT use, which provides detailed information on supervision techniques demonstrated to be favoured by parents, and techniques that are believed to reduce risks and increase benefits. Evidence of the social, emotional benefits of ICT, is located in section 2.3. Section 2.4 presents a detailed review of the current role ICT have in education and future career opportunities. Subsequently the perceived potential risks associated with ICT are discussed in section 2.5, including: exposure to inappropriate material, cyber bullying, social networking sites, disclosure of sensitive material, predators and pathological internet use. Section 2.6 establishes perceived determinants of parents' supervision. The subsequent sections of this chapter examine moral panic theory, with discussion on the phenomenon of moral panics in section 2.7. Cohen's (2002) Stages of moral panic are presented in section 2.8, with section 2.9 reviewing moral panics and the media in section 2.10. These crucial elements of background research create the foundation of this investigation and underpin the use of content analysis, described in detail in chapter three.

2.1 ICT Integration within a Child Context

Individuals born after the 1980s, commonly identified as 'digital natives' (Prensky, 2001), are considered innately technologically savvy and have grown up with technology (Margaryan, Litlejohn & Vojt, 2010; Prensky, 2001). An Australian study, conducted by Straker, O'Sullivan, Smith and Perry (2007), analysed computer habits of 884 Australian children with the mean age of 14 years. The study found over 90 per cent of Australian children surveyed had used the computer, with 52 per cent using the computer for between 1 and 7 hours per week. Furthermore, 10 per cent of Australian children surveyed reported using the computer for between 14-21 hours a week (Straker, O'Sullivan, Smith and Perry, 2007). A second Australian study, of 692 students, found 99.6 per cent of children aged 13

to 16 years, reported ICT access at school, with 95.7 per cent also reporting ICT and internet access at home (Fleming, Greentree, Cocotti-Muller, Elias and Morrison, 2006).

An American study found similar statistics with 93 per cent of surveyed teens having used the internet; 38 per cent of these using the internet for 1 to 5 hours a week, with some heavy users being online for more than 20 hours a week (Bryant & Bryant, 2005). Studies conducted in Taiwan found that 90 per cent of children had access to the internet at home and 41.2 per cent of males and 38.7 per cent of girls were using the internet for 1-5 hours a week (Chien-Huang & Shu-Fen, 2008). In the Netherlands, children between the ages of 11 and 15 years are using the internet on average for 11 hours per week (Van den Eijnden, et.al, 2010). The highest rates of internet users appear to be 12-15 years old (98 per cent) and 16-20 year olds (95 per cent) (Chien-Huang & Shu-Fen, 2008). These global statistics demonstrate the level of international participation regarding ICT usage and the high adoption rate of young users.

Studies conducted on American children and their ICT use found that they primarily use the internet for information retrieval, socialising and as a prevention of boredom (Bryant & Bryant, 2005). Specifically, Bryant and Bryant (2005) found 94 per cent of children who have access to the internet report they use the internet for school research, with 78 per cent reporting it helped them with school work. Chien-Huang and Shu-Fen (2008) surveyed 629 Taiwanese students from random schools to identify children's online activities and motivation for use. When looking at time spent on online activities, girls reported spending more time searching for homework information and emailing whilst boys reported spending more time playing games and double the amount of time downloading software. When analysing motivation for use, they found that the boys' primary motivator was information retrieval, secondary to boredom avoidance; whilst the girls' primary motivation for internet use was information retrieval plus socialising (Chien-Huang & Shu-Fen, 2008). It is argued by Chien-Huang & Shu-Fen (2008) that the internet is becoming one of the most important forms of media in young people's daily lives, second only to television.

The Australian Federal Government showed its support for the introduction of ICT for all individuals with the development of the Australian Government Department of Broadband

Communication and the Digital Economy in 2007. Confirmation of the governance of the dominant place of ICT in Australian society was established on April 7th 2009, with the announcement that the Australian Government would establish a new company to design, develop and operate a high speed National Broadband Network (NBN). The 8 year project was suggested to support 25000 local jobs and would be the single largest national infrastructure project in Australia's history (Australian Government Department of Broadband Communication and the Digital Economy, 2009). There is no question that ICT use has risen rapidly and has been vigorously taken up by youth with the strong social support and the support of governments.

While parents are usually the most influential socialization agents in a child's life, in relation to the internet, parents have found to have the least significant role (Swinarski, Parente & Noce, 2010). Parents seem reluctant to create and enforce rules for children's ICT use (Wang, Bianchi & Raley, 2005); however little research is known as to why this is so. Other studies suggest parental behaviours can have a profound influence in ICT use, claiming that parents play an important role in the psychological development of their children and their parenting practices may promote or prevent the development of internet related problems (Van den Eijnden, et.al, 2010). However, very little is understood about parents' perceptions of children's ICT use and the role that media discourse has on influencing their perceptions, suggested control measures and their supervision techniques used. This thesis sets out to study the role media discourse has in presenting information relating to children's ICT use, with a particular focus on claims to parents and suggested control measures.

2.2 Parental Supervision of Children's ICT use

The next section of this thesis will look at the popular concerns of parental supervision of children's ICT use. Parental supervision in this thesis pertains to all and any actions taken by parents or caregivers to monitor, supervise, communicate, develop rules/guidelines, to protect and safeguard children in relation to ICT usage. Particular focus will be placed on preferred supervision techniques used by parents to safeguard children and the effectiveness of these techniques. It is important to note that these fears may or may not always be founded on fact.

Parents have great concerns about the potential for the spread of sexually explicit material and antisocial behaviour that has been linked to the internet (Bryant & Bryant, 2005), nonetheless parents are commonly choosing ineffective supervision techniques. Livingstone and Helsper (2008) conducted a study with 1511 children and 906 parents from the United Kingdom which examined parental regulation of children's online activities. Parents who supervise their children's ICT use were found to favour co-use, rules and filters or monitoring software as preferred supervision techniques, however these strategies were not deemed to be effective in reducing risk. For the purpose of this thesis these strategies will be known as 'ICT regulation techniques'. A study conducted in America of 749 parents and children found 44 per cent of parents surveyed reported installing, monitoring or filtering software as a means of regulation (Wang, Bianchi & Raley, 2005). Because of the ever evolving nature of the internet it has been suggested that no filtering software packages are 100 per cent effective in blocking inappropriate material (Bryant & Bryant, 2005). Internet filters have been found to be somewhat effective, but they often block important educational information and in the case of accidental access to pornography they have been found to increase probability of occurrences (Bamford, 2004). This use of blocking software is not only ineffective, it has been known to increase incidence of accidental access to pornography.

Studies in South Korea show that parental attitudes, family communication and exposure to family violence are associated with internet addiction (Park & Kim, 2008). 'Internet addiction' or pathological internet use' is defined as the "inability of individuals to control the internet use, resulting in marked distress and/or functional impairment in daily life" (Park & Kim, 2008, p. 424). A study conducted in Taiwan of 1289 children found the probability of internet addiction is increased with the prevalence of leisure boredom and social internet activities (Chien-Hsin, Shong-Lin, L & Chin-Pi, 2009). Strict time restrictions have also been found to promote compulsive tendencies in a sample of 4483 Dutch students (Van den Eijnden, et.al, 2010). In two independent studies the only factors that have reduced internet addiction are outdoor activities and supportive parental co-use and parental participation (Chien-Hsin, Shong-Lin, L & Chin-Pi, 2009; Van den Eijnden, et.al, 2010). It is unclear how these factors work as a protective buffer although it is suggested that outdoor activity reduces leisure boredom and enhanced communication between parent and child fulfils children's

social motivation and consequently fosters socialisation and face-to-face peer relationships (Chien-Hsin, Shong-Lin, L & Chin-Pi, 2009).

ICT regulation techniques are the most common method used by parents to protect children against perceived harms. Research suggests, nonetheless that the most significant factor identified in reducing inappropriate internet behaviours of children is frequent communication between parents and young people (Stevens & Webster, 2008; Van den Eijnden, et.al, 2010, 2010). Parents who are actively involved in their children's everyday lives have been found to increase the use of the ICT for educational purposes in children (Heim, et.al, 2007). These studies suggest that quality relationships between parents and children are most important in safeguarding young people from internet misuse.

In summary, research suggests that parental engagement has been identified as a protective factor for mitigating risks of children's online activity (Heim, et.al, 2007; Livingstone & Helsper, 2008; Van den Eijnden, et.al, 2010). However, the research also suggests that parents commonly choose regulation techniques that are ineffective and have been found to promote rather than reduce risk taking behaviours. These include monitoring filters (Livingstone & Helsper, 2008; Wang, Bianchi & Raley, 2005;); ICT surveillance and strict rules (Livingstone & Helsper, 2008; Van den Eijnden, et.al, 2010). Strict parental rules have been linked with the increase of problem behaviour on the internet (Van den Eijnden, et.al, 2010), strict time restriction is associated with an increase in the presence of internet addiction (Van den Eijnden, et.al, 2010) and, finally, monitoring software is believed to be ineffective in safeguarding young people (Bamford, 2004; Bryant & Bryant, 2005; Cottrell, Xiaoming, Harris, D'Alessandri & Atkins, 2003). This demonstrates the grave differences in what research suggests are effective methods of safeguarding children and the unproductive and sometimes damaging supervision techniques commonly chosen by parents. These studies also validate the importance of further research and specifically the need to investigate parents' perceptions of children and ICT.

The educational and social complexities of ICT and their impacts on children is a relatively new area of study, yet there has been widespread research on their use. The latest data suggest that 88.8 per cent of Australians frequently use ICT (Internet world stats, 2012). The impact of ICT on Western society has been extensively discussed. There is no question that ICT have changed the way individuals live their lives. ICT have impacted on the way people view communication, socialisation, entertainment, education and work. ICT are believed to be critical for educational and career success and having the skills to efficiently and effectively use ICT is now paramount for children (Hargittai & Shafer, 2006). Children have been identified as the ‘defining users’ of ICT (Valkenburg and Valkenburg, 2009) and finally ICT have become the most popular leisure-time activity for children in the Netherlands, even more valued than watching television (Van den Eijnden, et.al, 2010).

It is the belief of this investigation that ICT use will continue to grow and change our society, as all individuals become more reliant on ICT for their social, educational and employment needs. The benefits and risks associated with the internet have been widely researched, with growing interest in the role parents play in reducing risk and increasing benefits to children whilst using ICT. The positive and negative impacts of ICT have often been established, and both sides contribute to the debate around parental supervision. The following literature review draws on academic research and expands on information in Chapter One, examining the social and emotional benefits of ICT, the role of ICT in Education; the perceived potential risk associated with ICT; influences of parental supervision and moral panic theory.

2.3 Social Emotional Benefits of ICT

In the early 1990s internet usage started to gain momentum. These were early concerns about the effect the internet had on its users. Some early research found the internet reduced social involvement and psychological well-being (Kraut, Patterson, Lundmark, Kiesler, Mukopadhyay & Scherlis, 1998). Other social aspects of internet usage became the topic of much investigation. For instance, connectedness and resilience have been studied extensively primarily because it is agreed by most that social ties and a sense of connectedness to one’s

environment play a beneficial role in the wellbeing of individuals. Kraut et al's. (1998) study was revisited in 2002; the negative findings from the first study were only found to be consistent with the early stages of internet development. Research in the later stages of the effects of the internet demonstrated a positive connection to social involvement and wellbeing outcomes with ICT use (Kraut, Kiesler, Boneva, Cummings, Henderson, & Crawford, 2002). One reason identified for these positive outcomes was the increased number of home internet users, which had quadrupled over the period, resulting in increased social interactions with already formed relationships having a positive effect on wellbeing (Kraut et al's., 2002; Valkenburg & Jochen, 2009). A recent study by Packiam Alloway, Horton, Alloway and Dawson (2012) found that young people who had used Facebook for over a year had higher verbal ability, working memory, spelling and social connectedness compared to young people that had used it for a shorter time. Positive social ties are believed to buffer stresses, by acting as a protective force (Kawachi & Berkman, 2006). It is important to note the positive wellbeing outcomes were not as evident with individuals who did not already have close relationships and relied on the formation of relationships through social-networking sites (SNS) (Kraut et al's., 2002; Valkenburg & Peter, 2009). Clarke's (2009) research with ICT and children, found the positive results of increased social involvement with ICT correlated also with younger users.

Social-networking sites (SNS) are identified as a way for children to locate support as they transition through adolescence to adulthood. It gives them a way to continue relationships even after geographical changes and provides them with peer support through a time when family is not always seen as a primary source of comfort (Clarke, 2009). The autonomy aspect of SNS is believed to reduce social barriers for individuals with lower self-esteem, resulting in increased social networks, which have been found to improve self-esteem over time (Ellison, Vitak, Steinfield, Lampe, 2011; Valkenburg & Peter, 2009). Studies have found that well-adjusted teens were more likely to use SNS, which significantly improved already formed relationships and were also less likely to communicate with strangers online than less well-adjusted youths (Mikami, Szewedo, Allen, Evans, & Hare, 2010). Mikami et al's, (2010) research also reconfirms recent findings, rejecting Kraut et al's. (1998) earlier study, which claimed the internet reduces social involvement and psychological well-being.

Current research has established that children are using ICT to promote both educational and social outcomes. However, childhood and adolescence is a time of self-discovery and negotiating between independence and interdependence can be challenging (Walker, 2005). ICT provide young people with the ability to generate communities and modify technology to accommodate individual needs. As one example of ICT use amongst children, the impact of gaming has been extensively researched, with much debate on the outcomes. Games have been identified as systems of rules by Hsu & Wang (2010). In learning the symbols, rules and finding out how to play the game and then applying these skills and knowledge to achieve a goal or the games goal, players begin to play the game (Hsu & Wang, 2010). Gaming can teach employable life skills in an educational setting that are invaluable like analytical thinking, multi-tasking, team building and problem solving under pressure (Clark & Ernst, 2009; Hilton, 2006). Increased social benefits of the internet also have been linked to gaming, especially in boys, through collaborative trouble shooting and networking computers with others (Clark & Ernst, 2009; Hilton, 2006). This suggests that even though boys are less likely to use the internet as a source of social communication than girls, through interactive gaming they can receive an educational experience and the benefits of positive social interactions via the internet.

2.4 The Role of Information Communication Technologies in Education

It is a role of education to prepare students for further education and careers in an employment sector that is ever changing and has an unknown future. To do this adequately educationalists must predict the trends and skills required by their students. Over the last 30 years there has been an increased use of ICT both professionally and domestically. There has been strong growth in the skilled jobs area, with individuals with vocational or tertiary training faring better in the employable market (Foundation for Young Australians, 2008). It is estimated that in Europe the importance of ICT to the economy has doubled in the last decade, with 20 per cent of jobs in the ICT sector or requiring ICT skills (Centre for Educational Research and Innovation, 2010).

ICT is not a novel concept in education, computers were introduced in the late 1940s (Molnar, 1997). However their role has changed dramatically since their first introduction as a mathematic problem-solving tool (Molnar, 1997). The 1990s saw the introduction of the World Wide Web and open source systems. This gave computers the capacity to provide an information service and significant developments of online learning systems, such as web conferencing and eLearning spaces developing online collaboration (White, 2008). Internationally and nationally ICT have been used in education to enhance learning experiences and develop ICT skills. As society is becoming more reliant on technology, particularly the internet, educators have seen the necessity to introduce ICT to young people and the educational curriculum.

Confirming this need, the Australia's federal Government committed \$2.4 billion to the Digital Education Revolution (DER) which has been designed to increase the capability, capacity and availability of ICT in Australian schools (Australian Government Department of Education, Employment and Workplace Relations, 2010). The aim of Digital Education Revolution's funding was to provide sustainable and meaningful change to teaching and learning in Australian schools. This was believed to prepare students for future learning and the skills they require to live and work in the digital world. The Digital Education Revolution has pledged to allocate funding to introduce high speed broadband connection to Australian schools, make all teachers more proficient in the use of ICT and enable parents to participate in their child's education through online access to learning (Australian Government Department of Education, Employment and Workplace Relations, 2010). The Digital Education Revolution's major funding element was the 'Secondary School Computer Fund'. Its agenda was to help schools increase ICT equipment for students Years 9 to 12 to achieve a computer to student ratio of 1:1, which was completed by the end of 2011 (Australian Government Department of Education, Employment and Workplace Relations, 2010).

Australian State education systems have also acknowledged the numerous changes and expectations to education due to ICT. The preamble to the Melbourne Declaration Goals on Education for Young Australians, released in December, 2008 (MCEETYA, 2008) recognises the impact that ICT advances have on society, suggesting current successful learners need more than proficiency in literacy and numeracy; they also require the skills to be creative and productive users of ICT. The declaration also states the need to increase ICT efficiency and skills for young people over the next decade (MCEETYA, 2008).

Queensland has also introduced ICT in education. In 2006 The Queensland College of Teachers was established as a statutory authority which created the 10 Professional Standards for Teachers. The 10 Professional Standards provide benchmarks for full registration of all Queensland teachers. Seven out of the 10 Standards discuss the practices and knowledge of ICT. In 2009 Education Queensland created the Smart Classroom webpage, which was set up to provide teachers, parents and students with a link to new ICT programs and information (Queensland Government, 2011). The Smart Classroom webpage also states the 'Smart Classrooms Professional Development Framework' for teachers and 'Student ICT Expectations' for Prep to year 10 for all Queensland State Schools. These policies document the ICT skills that need to be fostered and demonstrated by both teachers and students.

ICT are not passive learning tools, how individuals choose to use the internet can shape the very nature of the environment itself (Bamford, 2004). The impact and full potential of ICT is yet to be revealed and will continue to develop as both technologies and skills improve. White's (2008) analysis of current ICT trends in Australian education confirms that ICT are currently widely used in schools by both students and teachers, suggesting there is a broad range of ICT being used in Australian schools from personal hardware devices such as mobile phones, MP3 players, computers, tablets PCs, laptops, televisions and video, digital cameras to interactive whiteboards. Australian educators also are using a variety of software from podcasts, vod casts, peer-to-peer networking, blogs, wikis, tag clouds, smart cards and numerous educational packages that have influenced management systems and learning (White, 2008). These management systems include file sharing, student reporting, virtual classrooms, plagiarism exposure, collaborative work environments and student behaviour monitoring (White, 2008).

Furthermore ICT use in schools has now been confirmed in future curriculum planning. In 2008, the Australian Curriculum, Assessment and Reporting Authority (ACARA) was developed as a result of the Melbourne Declaration Goal's Action Plan (MCEETYA, 2008). This new national curriculum authority, which commenced implementation of the Australian curriculum nationally in 2012, demonstrated the requirement for ICT skills for all Australian students: "To participate in a knowledge-based economy and to be empowered within a technologically sophisticated society now and into the future, students need the knowledge, skills and confidence to make ICT work for them at school, at home, at work and in their communities" (MCEETYA 2008, p.41). It is unclear if this perception - that students require ICT skills to participate in a "knowledge-based economy", and that schools should be responsible of doing so - is created by a moral panic or assisting in fuelling it. More research needs to go into the media's influence on the development of educational policy. Nevertheless, with this belief MCEETYA proclaimed ICT capability as one of the seven General Capabilities in the Australian Curriculum (ACARA, 2012). The General Capabilities are considered key dimensions of the Australian Curriculum and are required to be addressed explicitly in all Learning Areas. The Australian Curriculum, Assessment and Reporting Authority General Capabilities document states "The general capabilities encompass the knowledge, skills, behaviours and dispositions that, together with curriculum content in each learning area and the cross-curriculum priorities, will assist students to live and work successfully in the twenty-first century" (ACARA, 2012, p. 3). The General Capabilities are as seen below, in Figure 2.1.

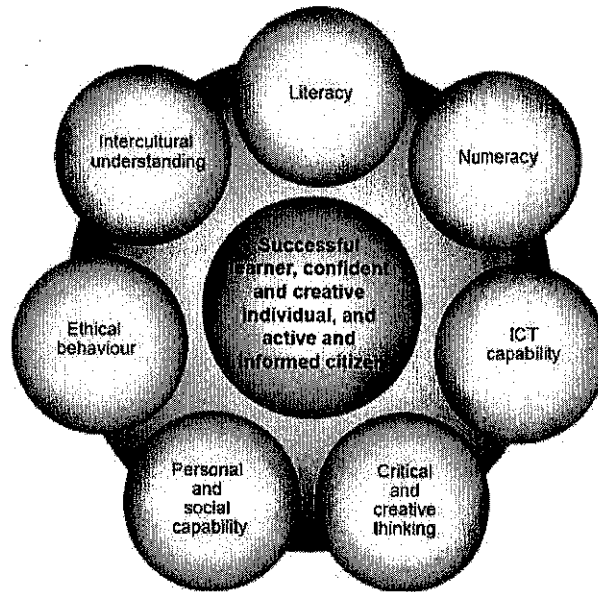


Figure 2.1: General Capabilities in the Australian Curriculum

Information Communication Technologies are widely used in education, influencing curriculum development. As educational tools themselves, they create both perceived educational benefits and growing concern. With the systemic use of ICT both in education and domestically, ensuring children use these technologies effectively and safely becomes problematic for both schools and parents. Potter and Potter (2001) suggest that all forms of 'deviance' plausible in the physical world have the potential to be obtained on the internet, although they debate whether or not it is easily accessible and exercised by many young people. Nevertheless, Ford (2009) reminds us of the legal and ethical right children have to be educated in a safe environment suggesting internet usage contracts, which are commonly used in schools, are not enough to protect children, as they are not effective. Park, Kim & Cho (2008) suggest interventions that decrease risk factors and increase protective factors are more beneficial than superficial educational programs, commonly used in schools. The next section of this chapter will explore the perceived risks associated with ICT use.

2.5 Perceived Potential Risks Associated with ICT

The very nature of ICT, their rising popularity and the ever-increasing amount of time spent on ICT create the potential for children to be exposed to, or disseminate, inappropriate material. As has been established earlier, the internet has considerable technical and social intricacies; the fear that uncensored information can be freely disseminated to the public, in what appears to be an isolated domain is held by many (Bryant & Bryant, 2005). The internet has no restrictions or limits; it provides good and bad information almost immediately and has the potential to penetrate most aspects of an individual's life (Livingstone & Helsper, 2008). The internet provides children with the ability to generate communities and modify technology to accommodate their needs. This provides unlimited potential for children however, also enabling young people to be exposed to or disseminate inappropriate material, either intentionally or unintentionally. Information that is digitally posted onto the internet can be duplicated, downloaded and dispersed by any viewer (Moreno, 2010). This capacity allows individuals the capability to easily disperse large amounts of information, with little to no accountability. Furthermore, once information is generated, it can never truly be destroyed by its creator. This makes young internet users very powerful and extremely vulnerable to the risks, including

2.5.1 Exposure to Inappropriate Material

Parents have concerns about the potential for the spread of sexually explicit material and antisocial behaviour that have been linked to the internet (Bryant and Bryant, 2005; Potter & Potter, 2001). In spite of this there is debate about the legitimacy of these concerns. Bryant and Bryant (2005) believe these concerns are reasonable and valid whereas Potter and Potter (2001) suggest that while there is an abundance of pornographic material available on the internet, very few sites are freely available, and most require credit cards to access. Still, other studies have confirmed twenty-five per cent of surveyed children admitted to being exposed to unwanted pictures of naked people or people having sex online (Wolak, Finkelhor & Mitchell, 2004). Whilst most reported they were unaffected by the inappropriate material,

a quarter of exposed children reported being very or extremely upset by the encounter (Wolak, et.al, 2003).

Inappropriate material dispersed via the internet is not only of a sexual nature. Tait (2008) suggests that the internet provides a means for disseminating horrific images and information without censorship from mainstream press. It also provides an outlet for groups to spread unpopular ideologies, for example: hate groups, weapon building instructions, promotion of risky health behaviours and illegal activities (McColgan & Giardino, 2005; O'Reilly & O'Neil, 2008). It is hard to quantify the effect exposure to this inappropriate material has on children, however research with adults has shown that content that combines sex and violence to women increases men's willingness to act aggressively and negatively towards women (Gunter, 2008), and as childhood is a developmental time where individuals are highly influenced by their environment it is reasonable to suggest that internet encounters have the potential to impact both negatively as well as positively on social emotional outcomes. Nonetheless, while some concerns may be legitimate, the level to which we should be concerned may be inflated (Potter & Potter, 2001).

2.5.2 Cyber bullying

Another growing concern associated with the internet is the potential for cyber bullying and unwanted messages. Cyber bullying is defined by The Encyclopaedia of Law and Higher Education (2009, p. 114) as "the use of communication-based technologies, including cell phones, e-mail, instant messaging, text messaging, and social networking sites, to engage in deliberate harassment or intimidation of other individuals or groups of persons using online speech or expression." Much research has found strong links between bullying and poor mental health (Campbell, 2005; Eslea & Rees, 2001; Rigby, 1997 and Rittakertta-Heino, Rimpela, Marttunen, Rimpela & Rantanen, 1999). For example Rittakertta-Heino et al., (1999) found a strong link between bullying and depression and suicidal ideation in victims as well as the perpetrators of bullying. More than 40 per cent of children reported being victims of cyber bullying, yet less than 10 per cent report this to their parents (Bhat, 2008).

Furthermore, 53 per cent of children reported having used the internet as a means of saying something hurtful or mean to someone (Bhat, 2008). The internet has characteristics that make it appealing to someone who intends to harass and victimise others through cyber bullying (O'Reilly & O'Neil, 2008). Fifty per cent of children believe cyber bullies use the internet to harass their victims as there are no substantial consequences (Bhat, 2008). It has been suggested by Pujazon-Zazik and Park (2010) that cyber bullying takes bullying to the next level, as it can provide anonymity to the perpetrator and can amplify harassment as the perpetrator may never fully view the damaging effects it has on its victims.

The effects for the victims of cyber bullying may be more severe than other forms of direct bullying, as there is the potential to broadcast to a larger audience, and it can happen at any time (Campbell, 2005; O'Reilly & O'Neil, 2008; Mitchell, Finkelhor, & Wolak (2007). This enables the harassment to be replicated many times, leaving the victim believing many more people are aware of their humiliation (Bhat, 2008; O'Reilly & O'Neil, 2008). The victim may never know their harasser, let alone how to stop them and home is no longer a respite from the abuse (Bhat, 2008). In addition, children are more likely to report harassment to friends than their parents as they believe parents are unable or unwilling to help, are embarrassed about the content of the abuse and are fearful of being banned from internet use making them further isolated and at risk (Bhat, 2008). As cyber bullying is relatively new, many theories on the effects of cyber bullying are unsubstantiated and further research on the effects of cyber bullying is required. One study found a negative link between school behaviour and children who were harassed online (Ybarra, Diener-West & Leaf, 2007). They found that harassed students had increased behavioural problems, felt unsafe at school, were eight times more likely to carry a weapon to school and reported skipping school or having two or more detentions the previous year (Ybarra, Diener-West & Leaf, 2007). Further research is required to more fully understand the negative impact of cyber bullying and harassment.

2.5.3 Risk Associated with Social Networking Sites (SNS)

With the interactive nature of the internet, an additional emerging concern is the growing popularity of social networking sights (SNS). Eighty one per cent of surveyed children had a profile on a social networking site (SNS), spending on average of 72 minutes per day networking (Rogers, Taylor, Cunning, Jones & Taylor, 2006). SNS can be used as a means of delivering supportive communication and forming social connections (Mikami, et.al, 2010; Moreno, 2010). Females are more likely to have more friends and post more supportive comments than males (Mikami, et.al, 2010). Whilst some forms of disclosure have been shown to result in higher-quality friendships and can improve wellbeing (Valkenburg & Jochen, 2009), the internet also encourages high levels of disclosure that can incite inappropriate behaviours (Moreno, 2010). Clarke (2009, p. 25) looks at the anonymity of the internet and identity formation, suggesting SNS give children the ability to ‘adopt different personas’ giving them the ‘sense of power with the click of a button’. However, the anonymity of the internet allows for the diffusion of disinformation and leaves the receiver unaware of whom they are interacting with and what their intentions may be. SNS can also create a medium for the spread of victimising data and inappropriate material (Moreno, 2010). Females and males questioning their sexuality via chat rooms have been found to be at greatest risk of being victimized online (Mitchell, Finkelhor & Wolak, 2007a).

2.5.4 Disclosure of Sensitive Material

Social networking sites and forums can lead to children disclosing sensitive material online. A 2006 study suggested that children were becoming more discreet with personal information and were restricting access to their information (Rogers, et.al, 2006). Yet more recent studies indicate younger children who use SNS are at an increased risk of disclosing personal information, their correct name, age and address (O’Reilly & O’Neil, 2008; Subrahmanyam et.al, 2006). Fifty four per cent of children reported posting their pictures on websites (Rogers, Taylor, Cunning Jones & Taylor, 2006). Forty one per cent of older youth profiles display content of substance abuse and 24 per cent display content of a sexual nature (Patchin

& Hiduja, 2010). Content that is digitally posted onto the internet can be copied, downloaded and dispersed by any profile viewer, having short and long term effects (Moreno, 2010).

Monitored chat rooms have been found to contained less sexual explicit communication and fewer obscenities (Subrahmanyam, et.al, 2006). Mikami, Szwedo, Allen, Evans and Hare (2010) study found a significant predictor of children displaying inappropriate photos on their profile was the self-reportion of depressive systems. These findings suggest that this behaviour could be a cry for help and the issues related to children, vulnerable to such behaviours, are more profound than simply the presence of the ICT. It is not certain if the information present in profiles is accurate, however there is a concern that these websites can redefine social norms of behaviour among children putting them more at risk (Moreno, 2010). More research needs to go into the motivation and effect of disclosure on SNS to young people.

2.5.5 Vulnerability to predators

Apprehension is developing around children and their vulnerability to predators whilst using the internet. The autonomy and ease of communication make internet chat rooms ideal hunting grounds for adult predators (Bryant & Bryant, 2005). With the use of the internet, paedophiles can operate from the security of their home, collect and distribute child pornography and foster relationships with children with the pretence to do harm (O'Reilly & O'Neil, 2008). Nineteen per cent of young internet users reported being targets of unwanted sexual solicitation between the year 2000 and 2001 (Mitchel, Finkelhor & Wolak, 2001). Yet Mitchell, Finkelhor and Wolak (2007a) report online solicitation has reduced. Undercover police investigations have increased the number of arrests for underage victims being solicited for sex online by 21 per cent since 2000 (Pujazon-Zazik & Park, 2010). It is thus hard to determine whether the risk of sexual predators is valid or concerns are being incited through moral panic.

Only seven per cent of young internet users surveyed reported meeting a person in real life that they met online (O'Reilly & O'Neil, 2008). In 24 per cent of these encounters, the online acquaintances lied about their age and were, in fact, adults (O'Reilly & O'Neil, 2008). In most cases the child was aware of the adult age of their online acquaintance and for various reasons continued a relationship with them (Mitchell, Finkelhor & Wolak, 2007a). More research needs to be conducted to understand the reasons why many children are engaging in conversations with unknown adults online. Whilst there are justifiable concerns about children being vulnerable to paedophile predators, it is important to note that the largest percentage of internet harassment of perpetrators is people under the age of 18 (Wolak, Finkelhor & Mitchell, 2004).

2.5.6 Pathological internet use

Pathological internet use, as discussed in Section 2.2, is defined as the “inability of individuals to control the internet use, resulting in marked distress and/or functional impairment in daily life” (Park & Kim, 2008, p. 424). Pathological internet use, also known as internet addiction, is believed to be a rising problem in society with many associated social, economic and legal implications. Implications include: the destruction of relationships, cessations of employment and an increase in unlawful resignation law suits (Warden, Phillips & Ogloff, 2004). Internet addiction is a growing area of interest as many adults and children are developing an uncontrollable urge to use the internet despite negative consequences (Van den et.al, 2010).

A study was conducted by Ha and associates (2007) in South Korea where 98 per cent of children use the internet. They found 30.8 per cent of survey participants were diagnosed with internet addiction. The study also found internet addiction was significantly associated with depressive and obsessive-compulsive symptoms. Similarly, a study conducted in Taiwan of 1289 young people found the probability of internet addiction is increased with the prevalence of leisure boredom and social internet activities (Chien-Hsin, Shong-Lin, L & Chin-Pi, 2009). These findings suggest that children are more vulnerable to pathological

internet use as they have less ability to manage their enthusiasm for activities that interest them (Ha, et.al, 2007). No studies were found on prevalence of internet addiction of Australian children however, as the levels of internet use amongst children; however is growing to similar levels of South Korea, it is fair to assume Australia may start to see a correlating trend.

2.5.7 Summary of Perceived Potential risks

The first of the perceived risks is discussed in Subsection 2.6.1 by introducing exposure to inappropriate material, with two conflicting opinions. Whilst both agree that that sexually explicit material can be found on the internet and that parents have concerns about ICT, they differ in their beliefs about the legitimacy of unsuspecting children having access to sexually explicit material. Nevertheless studies show that more than one in four children have reported being exposed to unwanted pictures of naked people or people having sex online (Wolak, Finkelhor & Mitchell, 2003). Most exposed children reported they were unaffected by the inappropriate material, however a quarter of exposed children reported being very or extremely upset by the encounter (Wolak, et.al, 2003).

Additionally, sexually explicit material is not the only inappropriate material of concern. Consequently, as previously suggested, ICT are not passive tools, all individuals that have access to ICT have the capacity to shape them. Thus all forms of 'deviance' plausible in the physical world do have the potential to be obtained and disseminated on the internet. However, similarly to the physical world, the idea of unwilling participants being exposed to this 'deviance' behaviours and information is minor and questionable. Therefore, while some concerns may be legitimate, the level to which parents are concerned may be inflated.

Subsection 2.6.2 commences with the definition of cyber bullying, followed by studies suggesting 40 per cent of children reported being victims of cyber bullying and 53 per cent of children reported having used the internet as a means of saying something hurtful or mean to

someone (Bhat, 2008). Cyber bullying has been linked to poor mental health (Campbell, 2005; Eslea & Rees; Rigby, 2001; Rittakertta-Heino, Rimpela, Marttunen, Rimpela & Rantanen, 1999). Additionally the negative effects associated with cyber bullying have been found to affect both the victims and perpetrators of the bullying (Rittakertta-Heino et al., 1999). Yet disturbingly children often did not reported being victims of cyber bullying to their parents as they believe parents are unable or unwilling to help, are embarrassed about the content of the abuse and are fearful of being banned from internet use making them further isolated and at risk (Bhat, 2008). This section finished with a recommendation that more research needs to look at the full impact of cyber bullying to victims and perpetrators.

Social networking sites were discussed in Subsection 2.6.3 suggesting studies indicate that children were becoming more discreet with personal information and were restricting access to their information (Rogers, Taylor, Cunning Jones & Taylor, 2006). Research also suggested that more than one in two children reported posting pictures of themselves on websites (Rogers, Taylor, Cunning Jones & Taylor, 2006). Yet older youth profiles display content of substance abuse and 24 per cent display content of a sexual nature (Patchin & Hinduja, 2010). Over disclosure on SNS have grave, short and long term, social, economic and legal consequences for children. Furthermore studies have found a significant predictor of children displaying inappropriate photos on their profile was the self-reporting of depressive symptoms (Mikami, Szewo, Allen, Evans & Hare, 2010). It was suggested that more research needs to go into the motivation and effect of disclosure on SNS to young people.

Furthermore it has been suggested that chat rooms, because of the autonomy and ease of communication make ideal hunting grounds for adult predators (Bryant & Bryant, 2005). Subsection 2.6.5 discussed the possibility of children being vulnerable to online predators. It was suggested that research needs to be conducted into understanding why children are engaging in conversations with unknown adults online.

Finally Subsection 2.6.6 discussed pathological internet use, suggesting it is believed to be a rising problem in society. Pathological internet use is believed to have many associated social, economic and legal implications, such as destruction of relationships, cease of employment and an increase in unlawful resignation law suits (Warden, Phillips & Ogloff, 2004). While no Australian studies were located on internet addiction, however studies in South Korea found 30.8 per cent of survey participants were diagnosed with internet addiction (Park, Kim, & Cho, 2008).

As discussed earlier, the internet is becoming a major source of information retrieval, entertainment and socialisation for children and also is being incorporated into home and educational settings. As noted above, there are various risks associated with using the internet. For this reason, and with an awareness of the potential negative effects of some internet behaviours, adults have an ethical obligation to ensure the education and safety of children online.

2.6 Influences of Parental Supervision

Parents often feel powerless in an internet environment; although an adult presence is essential in safeguarding children against risks (Bamford, 2004). Parents who are actively involved in their child's everyday lives have been found to increase the likelihood of children using internet for educational purposes (Heim, et.al, 2007). Frequent communication has shown to be the most significant factor in reducing inappropriate internet use (Van den Eijnden, et.al, 2010). Adams (2010) stresses effective parenting is closely linked to open communication, suggesting parents need to discuss internet etiquette and understand what is considered appropriate behaviour. McColgan & Giardino (2005) suggest that parents should consider signing a contract with children to outline appropriate/expected behaviours, as blocking software is not infallible.

Although the above evidence suggests that parental guidance, particularly open communication, can play a vital role in protecting children against the harms of ICT, recent evidence suggests this is not common practice. Furthermore, although the internet has been seen as a tool for fostering social communication, Hughes and Hans (2001) found the internet reduced communication between family members. Even with increased internet access in the home, parents provide significantly less information on internet use than any other source (Mikami, Szewo, Allen, Evans & Hare, 2010). Aslanidou and Menexes' (2008) study of 418 Greek adolescents from 17 different schools found only 19 per cent of adolescents suggested their parents wanted to know exactly what they were doing on the internet. Studies conducted in American found that 31 per cent of surveyed families had no established rules on internet use (Wang, Bianchi & Raley, 2005).

Rosen, Cheever & Carrier (2008) suggest as children get older, parents are more likely to use a neglectful or indulgent parenting style and less likely to supervise adolescent internet behaviour. These results are worrying considering parental communication and active participation have been found to reduce risks (Heim, et.al, 2007; Van den Eijnden, et.al, 2010). Studies have shown parents and children have differing ideas on the level of supervision provided by parents in relation to the internet. Parents underestimate children's engagement in risk taking behaviours online (Liau, Khoo & Ang, 2008) and overestimate the amount of communication and supervision they give in relation to the internet (Khoo, 2008; Liau, Khoo & Ang, 2008). An American study of 749 parents and children found 61 per cent of parents believed they monitored their child's internet use, but only 38 per cent of young people reported any form of monitoring by parents (Wang, Bianchi & Raley, 2005). This discrepancy could be because parents and children have differing ideas on what constitutes monitoring; parents could overestimate their involvement or children could be unaware of parental monitoring practices.

Differences have been found in parental supervision styles. Wang, Bianchi and Raley's (2005) study of adolescent internet use and family rules found fathers are more likely to check children's' online visited sites. Younger parents, parents who use the internet with adolescent's and parents with younger teens were more likely to monitor their child's internet behaviours (Wang, Bianchi & Raley, 2005). Wang, Bianchi and Raley's (2005) findings suggest that parental supervision was decreasing as the risk to adolescents increases with age.

Although parental rules and regulations are widely practice to reduce the risks associated with ICT, a study by Livingstone and Helsper (2005) found that, although parents of younger adolescents, parents from higher socioeconomic status backgrounds and parents who were more familiar with the internet were more likely to implement rules and regulations, the presence of supervision could not be directly linked to risk reduction for adolescents. Similarly, strict parental rules are linked with an increase in problem behaviour on the internet (Van den Eijnden, et.al, 2010). Also, strict parental rules have not shown any impact on adolescents' concerns about their online privacy, however parental communication and participation has (Youn, 2008). These results suggest that although parent's use a variety of strategies to reduce perceived risks of ICT, many of these strategies have shown to be ineffective and/or increasing risky behaviour.

It is important to note that it is unclear if the presence of the rules created risk taking behaviour or if the presence of risk taking behaviour led parents to enforcing rules. More research needs to be conducted in this area. Nevertheless, as has been demonstrated, quality relationships between parents and children have the ability to safeguard children from internet misuse. Active communication also has the capability to strengthen families (Park, Kim & Cho, 2008). Parents play an important role in the psychological development of their children and their parenting practices may promote or prevent the development of internet related problems (Van den Eijnden, et.al, 2010). Parents' involvement is paramount in keeping children safe whilst using the internet. Parents are young peoples' primary care givers, thus the greatest stakeholders in the safety and protection of their children. Little is understood about the factors that influence parental supervision of adolescent internet use.

This is particularly important given the effectiveness some forms of parental supervision have on reducing risk.

Almost ten years ago, 73 per cent of parents reported that ICT are worthwhile and improve their children's school results (Livingstone & Bober, 2004) but parents were also concerned about their children's behaviour online. Yet the majority of young people have no parental supervision whilst online (Liau, Khoo & Ang, 2008). Those parents who do supervise their children often employ techniques which are inappropriate and are ineffective in reducing risk (Livingstone & Helsper, 2008; Van den Eijnden, et.al; Wang, Bianchi & Rapley, 2005). This generates questions on why are parents choosing ineffective supervision techniques that have been found to promote inappropriate behaviours rather than reduce them. Do the media adequately inform the public and thus parents of their role in promoting positive behaviours and the reduction of negative behaviours of young people online? It is not suggested that ICT are without risk, however it is the representation of ICT by the media that can influence the public's attitudes and perceptions, and consequently supervision techniques used. Furthermore, given the research suggesting that the media often develops moral panic to reassert family values (Hunt, 1997) the concern is that some commonly used parental supervision techniques, that have been found to increase problematic behaviour such as ICT surveillance, strict parental rules and filters, maybe promoted through the media. Additionally, with the strong educational push for ICT it is important to ensure the public is provided with accurate information that is not designed to incite a sense of fear or helplessness but empower individuals and safeguard children. The following sections of this chapter discuss moral panic theory. The phenomenon of moral panic is examined, followed by four identifiable stages of moral panic. Goode and Ben-Yehuda's (2010) three theories of moral panic are also discussed, illustrating the different aspects of a panic and, finally, moral panic and the media will be explored, clarifying how media representation of an event or issue can influence public perceptions.

2.7 Phenomenon of Moral Panic

Moral panics often arise in periods of social change that bring about transformations in established ways of life (Goode & Ben-Yehuda, 2010). It is not believed in times of social change that specific issues are targeted; however social change often results in cultural strain or ambiguity. The unrest pushes the moral boundaries and creates uncertainty and fear (Cohen, 1980). Often moral panic derives from the uncertainty of the change, and fears about how the change will impact on society. A fundamental characteristic of Cohen's research on media-produced fear and anxiety was the boundary confusion of the young people known as 'Mod' and 'Rockers'. Previous anti-social and hooligan behaviour could be assigned to working class males, however the 'Mod' and 'Rockers' were considered more mobile and less class bound. The fact they were not easily identified and could infiltrate all aspects of society, provoked unease and hostility (Thompson, 1998).

Similar to the perceptions of the 'Mod' and 'Rockers', it has been suggested by Livingstone and Helsper (2008) that ICT have no borders or boundaries, and has the ability to provide good and bad information almost instantaneously. The anonymity and ease of access of ICT enables for relatively uncensored data to be freely disseminated to the public, in a very private domain (Bryant & Bryant, 2005). The very nature of ICT creates the ability for the infiltration of risks and benefits to all users. It is also believed that threats towards children and young people are often more likely to incite a moral panic (Johansson, 2000) adding to the potential for a moral panic around young people and ICT.

2.8 Four stages of Moral Panic

An influencing factor of Cohen's theory of moral panic identified four consistent stages of social reactions to "something stressful, disturbing or threatening" (Cohen, 1980, p22). Cohen's model of moral panic identified common stages including (1) warning; (2) impact; (3) inventory; and (4) reaction. While these are identifiable elements of moral panic, the

stages are not considered linear or continuous. The model is considered “circular and amplifying” (Cohen, 1980, p24), thus society can be in any or multiples of the four stages of panic at any given time, intensifying the public’s fears.

The warning stage.

This stage is characterized by the public’s concern about an issue or phenomenon that may or may not exist, yet is perceived as a potential threat. In this case, the public’s perception will be gauged subjectively, based on whether after having read the article, the reader’s fear of children using ICT would increase, decrease, or remain the same. At this stage the authenticity of the threat may or may not be relevant. This is important as there are identified risks associated with children and ICT. However the media’s representation of children and ICT creates the public perception and can lead to increased fears and increased controls.

In this stage the phenomenon is defined in basic terms, yet the problem is inflated enough to suggest that the issue will undoubtedly upset social order. For instance, the media portrays attacks as being random in nature, leaving all children at risk. This stage is noticed usually after at least one incident has occurred. In the case of ICT and children there has been multiple reports of incidents in academic and public debates. Warnings become “out of proportion to the imminent threat” (Cohen, 1980, p.146) and increasingly complicated and formalized as time passes. This aspect will be discussed in more detail in in stage 3 ‘*the inventory stage*’ of this subsection.

The impact stage.

The impact stage immediately follows a predicted event or occurrence of an incident, a period of disorganisation and alarmist response occurs, known as the impact stage. Individual responses can vary, although individuals often mimic the emotional response of those around them, creating an emotional group mentality (Cohen, 1980). For example, the depiction of ICT and children maybe noticeably different to the representation of ICT in

general, suggesting an alarmist response. In this case, the control measures suggested for risk will be significantly different; for example, government interventions, through increased policing, law changes and the development of governmental programs.

The inventory stage.

The inventory stage is the most complex of the stages, and it occurs when the public evaluates the gravity of the phenomenon (in this case ICT), what has occurred (the incidents and dangers resulting from ICT use), and the condition of victims (the children) are determined. Furthermore the media is largely responsible for the stylized and stereotypical reporting of the issue and allegations, such as the over-melodramatic reporting of negative events, which intends to increase fear and incite the need for control. Additionally, the media presents the assumption that the event(s) will inevitably reoccur and such predictions often become self-fulfilling prophecies, thus escalating the public's fears about the issue. In this case any misinformation that increases fear of children's use of ICT could reduce children's access to ICT and thus decreases the benefits of ICT to children or increase strict rules and monitoring devices that are known to be ineffective and increase risk taking behaviour of children.

The reaction stage.

The fourth and final stage of Cohen's moral panic theory is the reaction stage. In this stage individuals try to comprehend the phenomenon events that have occurred, and constructed messages. Discussions no longer focus on the original phenomenon or events, but instead focusing on perceived related issues, specifically solutions and remedies to the issues. For instance, the discourse used by the media and claim-makers focusing on perceived issues, such as cyber bullying, inappropriate material and/or vulnerability to predators, rather than ICT and the developments themselves. Furthermore, an increase in solutions and remedies that involve interventions will be suggested for children and ICT resulting in heightened controls and creating a social control culture. This stage would be demonstrated through targeted external interventions; for example, Government interventions lead by claim-makers.

Reactions come under three categories: sensitization; the social control culture and exploitation.

Sensitization results from the increased media attention, creating more vigilant notice and reclassification of images, signs and symbols linked to the event.

The social control culture refers to the heightened controls and changes in official social controls such as increased policing and policy changes.

Exploitation refers to the direct or indirect commercial gain resulting from events, such as marketing for consumer goods that appeal to the stereotypes of the threats and perpetrators, known as ‘folk devils’ (eg. filtering and monitoring devices, increased ICT in schools). Also, politicians, criminal lawyers and court officials also can directly and indirectly gain from the reactions of such events.

It is important to note that whilst these are identifiable elements of a moral panic, they are not regarded as linear or continuous. Thus society is not believed to be in a singular stage at one point in time, the elements are considered “circular and amplifying” (Cohen, 1980, p24), which can result in the escalation the public’s fears. Therefore the purpose of this research will not be to identify at which singular stage the moral panic, if any, is perceived to be in. The presence of all four stages will be assessed and required to categorically state a moral panic has been created and fuelled by the Queensland newspaper media.

2.9 Three Theories of Moral Panic

Goode and Ben-Yehuda (1994) extend on other concepts based on the dimensions of motives of claim-makers and moral entrepreneurs identified in moral panics, developing three different theories of moral panic; *grassroots*, *interest groups* and *elite-engineered* panics. *Grass roots* panic suggests that while some concerns and discourse maybe played out in the media and among political bodies, the main concern is felt deeply in the attitudes and

sentiments of the populace, which are brought forth by particular events. Panic from *interest group*, insinuate the moral panic is an outcome or reaction, intended or not, on behalf of particular group ‘moral entrepreneurs, claim-makers’ who work to bring attention to a specific moral concern. The third *elite-engineered* panics are believed to be a conscious and intentional result of propaganda campaigns designed to elude a genuine solution to a tangible problem, as disclosure of the real solution would undermine elite interest. Panics should not be classified as one or another, but instead these theories illustrate the different aspects of a panic (Baerveldt, Bunkers, De Winter & Kooistra, 1998; Goode & Ben-Yehuda, 2010).

2.10 Moral Panic and the Media

Cohen (2002) suggests that a crucial dimension for understanding moral panic and deviance is the means by which the information is received about the behaviour in question. According to Cohen, mass media plays a central role in the development of a moral panic. Media do not plainly report events that are newsworthy themselves. ‘News’ is often the end product of a systematic sorting, and selecting that adheres to the agendas of elite personnel and appeals to a particular audience (Hall, Critcher, Jefferson, Clarke, & Roberts, 1978). Personalised dramatic events that incite feelings of sadness, sentimentality and humour may have negative consequences are considered newsworthy (Hall et al., 1978). The media acts as a ‘framing device’ through over-reporting and directing attention on specific events and individuals inciting a moral panic.

A common criticism of moral panics is they are often ‘present-centred’. That is, they focus specifically on the event and often do not address the multi-factorial issues and processes that lead up to the panic (Rohloff & Wright, 2010). Events are often distorted through the media and presented in misleading headlines that maybe discrepant with the real story (Thompson, 1998). For example, the headline might read ‘Assaults in Brisbane’, but maybe referring to a reduction of reported assaults in the area. For this reason it is believed that articles relating to ICT and young people require investigation and analysis.

Even though a significant characteristic of a moral panic is the sensationalised headlines by the mass media and melodramatic discourse that grossly exaggerates the seriousness and importance of certain events, it is not suggested that moral panics cannot be informative (Johansson, 2000). This is important as, previously stated, it is not suggested that ICT are without risk. However, it is the representation of them by the media that can influence attitudes and perceptions, and thus change children's ICT availability and behaviours as well as parental and governmental controls. This effect has the potential to leave children at greater risk, of not acquiring adequate knowledge of how to use ICT safely. It also may lead to inappropriate supervision.

Cohen (2002) discusses 'good and bad' moral panics in the 3rd edition of his book, asserting attention should be placed on the media debate and 'proportionality' of the panic, and not on its existence, causational issues, prevention or control. Zajdow's (2008) research into moral panic suggests it is not necessary to assess the authenticity of the claims, but to account for their appearance and continuance by the 'moral entrepreneurs'. Cohen's (2002) key theme is that perceptions matter. Whether an issue or event actually occurs is largely irrelevant in terms of the impact it can have on the collective masses. Declaring something as moral panic assessment should not be the risk itself or its management, but the way it is perceived (Cohen, 2002).

To date, there have not been any discourse studies of how children's ICT use is represented by Australian newspaper media. Discourse analysis plays an important role in establishing how a new technology is viewed and how fast this technology becomes a part of society through this discourse (Hibino & Nagata, 2006). This thesis will make a small contribution to understanding current discourses surrounding young people's ICT use. This study aims to develop a better understanding of how the Queensland newspaper media represent children's ICT use. Specifically, do the media represent children's internet and ICT use in a stylized stereotypical manner? Does the media create a 'social control culture' through heightened controls as the response to children and their ICT use? Finally, has a moral panic developed around children and ICT?

2.11 Summary

It is evident that ICT have become an important component in the lives of most individuals in Australian society. The internet has changed the way people gather information, communicate, learn and do business. Australian schools have seen the potential for educational and social benefits of ICT, implementing strategies and allocated funding to increase ICT into schools (White, 2008). This chapter has investigated a range of studies exploring the aspects that make ICT an unparalleled educational tool create massive technical and social complexities (Greenfield & Zeng, 2006).

The most significant factor found in reducing risks and increasing benefits associated with ICT to children was parental communication and active participation (Youn, 2008; Park, Kim & Cho, 2008; Van den Eijnden, et.al, 2010). However the majority of parents were found to favour ineffective supervision techniques. Newspaper media is a significant source of information for the public and parents however, very little is understood about parents' perceptions of children's ICT use and the role that media discourse has on influencing their perceptions. This chapter demonstrates this scarceness as a justification for a research investigation with such a focus. The next chapter discusses the methodology of this research investigation

Chapter 3: Methodology

In this chapter the conceptual framework of this research will be explored, and the use of discourse analysis, specifically content analysis, as the methodology explained. Section 3.1 will unpack the conceptual framework used in this research investigation. The method of analysis will be clarified and an explanation of why content analysis was chosen for this research will be addressed in section 3.2. Section 3.3 outlines the criteria and sample size used. This chapter continues with a thorough explanation of the method of investigation in section 3.4. Subsection 3.4.1 addresses how Cohen's (1980) definition of moral panic relates to this research and subsection 3.4.2 explains how Cohen's (1980) four stages of moral panic will be used in this investigation. Section 3.5 of this Chapter discusses the key variables descriptors that will be tested in this investigation. Subsection 3.5.1 covers how the themes were identified, linking their relationship to this research and to moral panic. The use of a control group is explained in subsection 3.5.2. The relevance of persuasive tone used and sub-categories are discussed in subsection 3.5.3, followed by a discussion of how a culture of social control can be identified and its relationship to moral panic theory and this investigation in subsection 3.5.4. This chapter finishes with a summary in section 3.6.

3.1 Conceptual Framework

As has been stated in chapter one, the aim of this research investigation is:

To determine using discourse analysis, how ICT and children are being represented in the Queensland newspaper media, and to determine if a moral panic has developed around children and ICT.

From this aim three sub questions were raised:

Sub question 1: To what extent does the media represent children's internet and ICT use in a stylized stereotypical manner?

Sub question 2: To what extent does the media suggest heightened controls as a response to children and their ICT use?

Sub question 3: What is the nature of the moral panic developed around children and ICT?

This section specifies how Cohen's (1980) moral panic theory will be utilised to evaluate whether a moral panic has been created and fuelled by the Queensland newspaper media on ICT and children. This research draws on Cohen's (1980) definition of moral panic, detailed in chapter one, section 1.2, and Cohen's (1980) four stages of a moral panic, detailed in chapter two, section 2.9. These sections explain the methodology used in this investigation to determine if a moral panic has been created around ICT and children and explain how the above questions will be answered. This research investigation can best be demonstrated by a graphical representation, as shown in Figure 3.1.

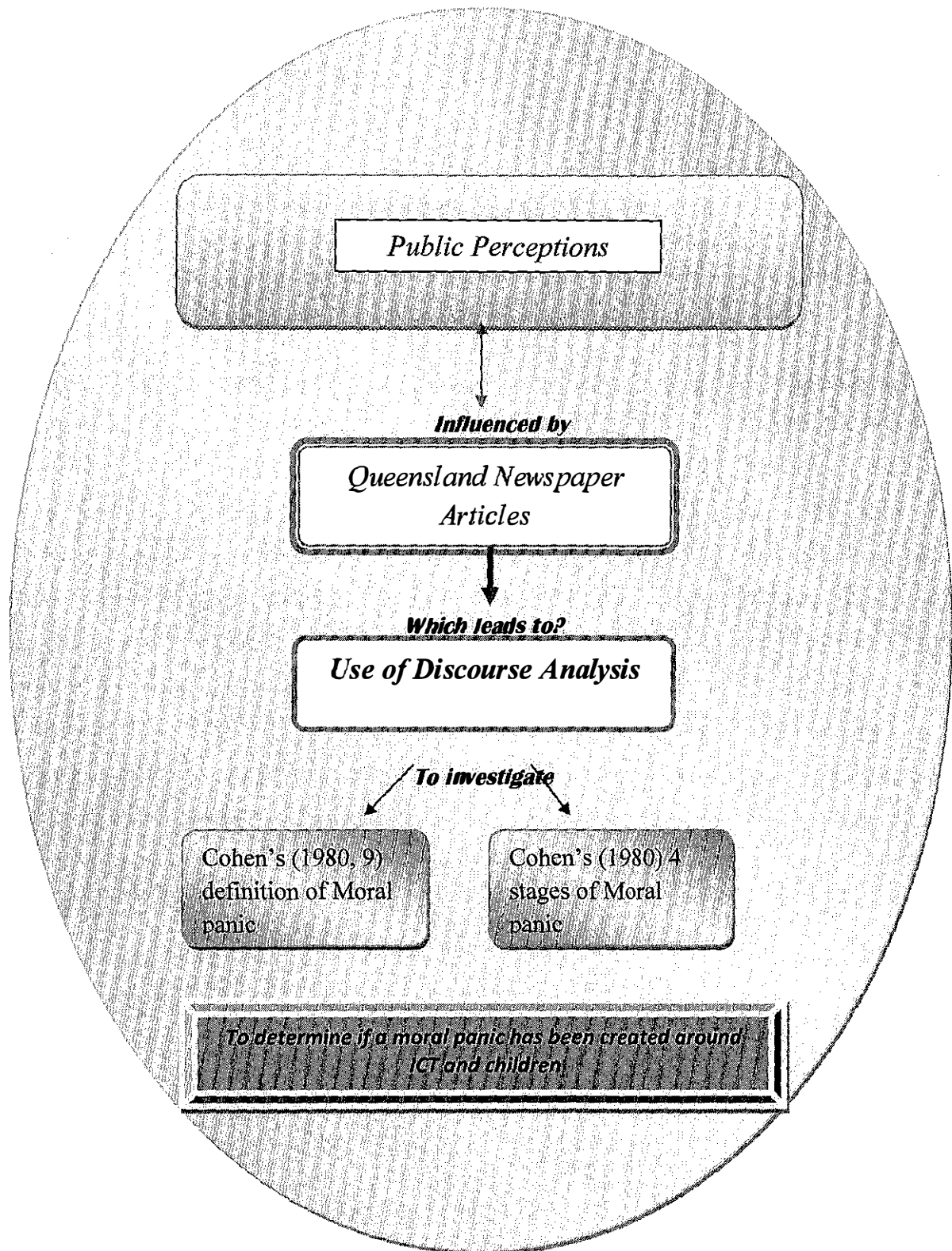


Figure 3.1: Graphical representation of the conceptual framework of this study

3.2 Method of Analysis

As stated in chapter two, ‘news’ is often the end product of a systematic sorting and selecting that adheres to the agendas of elite personnel and appeals to a particular audience (Hall, et al, 1978). In cases of a moral panic, the media acts as a ‘framing device’ through the stylized and stereotypical over-reporting of issues and directing attention on specific events and individuals inciting a moral panic. A mixed method approach, using a form of discourse analysis, was used to determine whether, and to what degree, the newspaper media could be characterized as fuelling a moral panic around children and ICT.

Discourse analysis has been used extensively over the last 15 years (Potter & Weatherell, 1993). While there are many types and methods of discourse analysis, a straight forward definition is that discourse analysis is the making of meaning from language in use (Weatherell, Taylor, & Yates (2004). Some discourse analysis is based on linguistics and analyzed in terms of grammatical structures and textual features (Thomas, 2005). Other discourse analysis is not focused simply on language as an abstract system. Discourse analysis tends to be interested in what occurs when people draw on their knowledge, memories and understanding of language to make generalizations. In other words, discourse analysis is concerned with the influence that language has on communities patterns of belief and habitual actions (Johnstone, 2002). Discourse analysis is the means of discovering how a shared meaning can be created via chunks of information. It creates a possibility for discourse to be cross-examined, interrupted and reframed (Luke, 1997) in an attempt to destabilize the ‘authoritative’ discourse (Apple, 1996). It is the belief of this investigation that “discourse is shaped by purpose, and discourse shapes possible purposes” (Johnstone, 2002, p. 9). With this understanding and the understanding that this research pertains to how Queensland media represents ICT to the public, this approach was considered the most applicable to answer the research question.

Content analysis is a type of discourse analysis. As its name suggests, it is the analysis of content, using a systematic, rigorous approach. Content analysis is a flexible method that allows for both qualitative and quantitative approaches to be used and can be applied to many research problems, involving discourse (White, 2006). Content analysis was first founded in large studies of mass communication, as it allowed for the identification and quantification of reoccurring, identifiable aspects of text content, known as manifest content (White, 2006). 'Manifest content' analysis enables the identification of the physical data elements represented in the media articles to be presented and counted. In this case, such data will consist of key variable descriptors discussed in section 3.5; for example, frequency of themes (as seen in subsection 3.5.1), frequency of persuasive tone and sub-categories (as seen in subsection 3.5.3) and culture of social control, constructed by number of claim-makers and types of control measures suggested (as seen in subsection 3.5.4).

As previously suggested both quantitative and qualitative approaches are used as both are required to gauge a full understanding of article representation and thus meaning to the public. Content analysis is the best method for this investigation as it allows for the interpretive reading of symbolism that underpins the physical elements presented in the data to be considered and measured using indicators, known as 'latent content' (White, 2006). Examples of such data in this investigation will be the identification of a persuasive tone of the message in the articles as either positive, negative or neutral (as seen in subsection 3.5.3); the approaches used in articles such as potential dangers, personal experiences or informative (as seen in subsection 4.2); and the direction of the article, such as to whom the article suggests has responsibility (as seen in subsection 3.5.4). Furthermore, the use of claim-makers and their credibility can be checked for presence or omission from the articles, using latent content analysis. Latent content analysis is important as it provides significant understanding about the whole messages and meaning in the data, and thus its impact on perceptions, which is the main question of this research.

Like all methods, there are advantages and disadvantages in manifest and latent discourse analysis, however it is through using both that the disadvantages are reduced. It is suggested that using both manifest and latent discourse analysis is particularly important when analysing newspaper articles as it allows for the whole message to be assessed and measured and to provide a greater understanding of how the issue(s) are represented in articles (Neuendorf, 2002). This method also permits specific discourse and themes to be identified and explored through extensive data collection of multiple articles over time. This will illuminate the presence of 'stylized and stereotypical representation' (Cohen, 1980) and identify whether a 'social control culture'; (Cohen, 1980) which can lead to heightened controls is present in the discourse surrounding ICT and children, and support the presence of a moral panic.

It is suggested that the main aim of a moral panic is to promote fear through control, using reoccurring, decontextualized, stereotypical news coverage (Cohen, 1980). Content analysis allows for the systematic analysis of the written word, both qualitatively and quantitatively (Wilson, 2011), to study the activities of selected groups (Baszander & Dodier, 2004) in order to illuminate any issues (Cresswell, 2008). Although content analysis is very useful for revealing trends and themes in the macro world (Donnelly, 2007), some criticism surrounds it, as it cannot be used to attribute cause. As research in moral panic is not concerned with causational issues (Cohen, 2002), but with the accountability and continuance by 'moral entrepreneurs' (Zajdow, 2008), a case study using this method of content analysis is deemed to be most appropriate for this study. The method allows for key themes to be identified, classified, coded, and quantified, supporting results statistically and reducing any perceived biases of results. This chapter provides background information on the sample chosen and a detailed description of the method of data collection.

3.3 Sampling

The sample (n=246) consists of all articles pertaining to 'ICT, digital media and the internet' gathered from The Courier Mail and The Sunday Mail over a 12 month period from June 2011 to June 2012. These two newspapers were chosen as The Courier Mail is Queensland's capital city, Brisbane's, local daily newspaper and The Sunday Mail is its Sunday counterpart.

Articles were located using Australian and New Zealand Reference Centre (via *EBSCOhost*), a comprehensive database that has access to both The Courier Mail and The Sunday Mail. All articles with the terms: 'ICT and/or the words digital media, internet' were chosen from the 1st June 2011- 1st June 2012 and were subsequently analyzed. This search located 578 results. Three hundred and thirty two articles were removed as they pertained to the media more generally and did not have elements of digital media, internet or ICT in the articles. The final sample of 246 articles addressing children and or about children consisted of 41 articles that do, leaving 205 articles not addressing children. The 205 articles not addressing children were used as a control group. This will be discussed in more detail in subsection 3.5.2.

3.4 The Method of Investigation

This section of this chapter outlines the method of investigation used in this research. How Cohen's definition (1980) of moral panic will apply to this research will be covered in subsection 3.4.1. This discussion is followed by an examination of how Cohen's four stages of moral panic are applied in this investigation. The aim is to discover if a moral panic has been created and fuelled by Queensland newspaper media around children and ICT.

3.4.1 Moral Panic

As discussed earlier, the method chosen to determine if and to what extent Queensland newspapers could be characterized as promoting a moral panic incorporated quantitative and qualitative approaches. Elements of manifest content analysis and latent content analysis were used. The design was quantitative in terms of using descriptive statistics to measure frequency (i.e basic statistics on number and percentages of articles). The content of the article (the main message of the article), the persuasive tone of the message (positive, negative or neutral), and the direction (to whom the article suggests has responsibility) whether it be the individual, parents or the government through heightened controls, was described using qualitative techniques. These two methods were used to assess if Queensland newspaper articles were creating and fuelling a moral panic around ICT and children.

The conceptualization of the term ‘moral panic’ in this research is taken from Stanley Cohen’s (1980) definition. He maintains that a moral panic is “a condition, episode, person or group of persons” (in this case, ICT) that become defined as a threat to societal values and/or interests (in this case children). He goes on to state the very nature of a moral panic is through its presentation, which is done in a ‘stylized’ and ‘stereotypical fashion’ by the mass media. For example, the media portrays ICT as dangerous to children and children are helpless victims to random ICT attacks.

What Cohen describes as “moral barricades” are manned by individuals, such as “editors, bishops, politicians” and other “socially accredited experts”. Such as parents, teachers, and other professionals assume the task of explaining the phenomenon. They “pronounce their diagnoses and solutions” for dealing with the problem evolve or, more often, resorted to (in this case external interventions, such as increased policing, changes in policy, schools interventions and parental restrictions). The condition then disappears, for a short term then reappears. Cohen argues the condition may suppress or deteriorate or becomes even more visible and in doing so exacerbate the issues. In this case the real reason for children’s ICT misuse persists, potentially increasing risky behaviours that continue to endanger children.

The public's fear of children's ICT use amplifies, resulting in stricter external interventions that exacerbate the issues.

3.5 Key variables descriptors

To evaluate the presence of all four stages of a moral panic, the following key variables are assessed and measured.

3.5.1 Themes

To establish if ICT are believed to be a 'problem' or 'potential threat', which is consistent with a moral panic, the principle representation of ICT was identified. This was done to determine the overriding image of ICT represented in the media. An increase of articles pertaining to negative issues such as cyber bullying, unwanted messages and vulnerability to predators would be consistent with a moral panic; however a high number of positive articles or articles discussing ICT and/or their developments would not be consistent with a moral panic.

The classification used in this research to determine to the persuasion of articles, whether they are considered negative or positive, will be described in more detail in subsection 3.5.3. All articles were individually inspected, and 11 predetermined themes were identified. The content of each article was initially measured in relation to the frequency of appearance of the following 11 themes, as seen below.

Newspaper articles about ICT were sought with perspectives on:

1. Education/ employment

If an article discussed any form of impact ICT have on education and or employment opportunities, the article was coded as Theme 1, Education/employment.

2. Social emotional impact of ICT

If an article specifically discussed the social emotional impact of ICT by using the term 'social emotional' the article was coded as Theme 2, Social emotional impact of ICT.

3. Cyber bullying

If an article discussed any form of cyber bullying and or any form of unwanted messages received through ICT the article was coded as Theme 3, Cyber bullying.

4. Exposure to and dissemination of inappropriate material

If an article discussed any form of exposure to and or the dissemination of inappropriate material, whether it be visual or written, that was not defined by the article as Cyber bullying, the article was coded as Theme 4, Exposure to and dissemination of inappropriate material.

5. Social networking sites

If an article discussed social networking sites, the article was coded as Theme 5, Social networking sites.

6. Vulnerability to predators

If an article suggested individuals were vulnerable to financial or physical harm, through their use of ICT using terms 'predators or prey' the article was coded as Theme 6, Vulnerability to predators.

7. Gaming

If an article discussed any form of gaming using the terms 'gaming and or game' the article was coded as Theme 7, gaming.

8. Pathological internet use

If an article discussed pathological, internet addiction or over use of ICT the article was coded as Theme 8, Pathological internet use.

9. Economic advantages

If an article discussed some form of economic advantage created through the use of ICT or economic gain by established businesses or individuals, without discussing employment opportunities or new careers in the industry (i.e. Theme 1) the article was coded as Theme 9, Economic advantages.

10. Filters

If an article discussed the use of filters, blocking or monitoring devices specifically, the article was coded as Theme 10, Filters.

11. Software and Hardware developments

If an article discussed software and or hardware developments, without discussing filters and or monitoring devices, the article was coded as Theme 11, Software and Hardware developments.

As previously stated in section 3.3, the Queensland newspaper media created 246 articles discussing ICT over the 12 month time period. As some articles discussed multiple themes, the results were calculated under each individual theme heading, resulting in the 11 themes occurring 281 times in the 246 articles. This ascertains that there is a media focus on ICT, which has developed over time, and is consistent with a moral panic.

A more rigorous qualitative analysis was then conducted on the articles and their themes. The themes were each subdivided into three sub-categories, positive, negative and neutral and were then cross-examined with the literature to establish if the threats were deemed “out of proportion to the imminent threat” (Cohen, 1980, p.146) and if an apparent breakdown or fracturing of social order could be established leaving people at risk in some way. This will be discussed in more detail in subsection 3.5.3, Persuasive Tone and Sub-categories.

3.5.2 Control Group

As it has been suggested, ICT are not believed to be without risk. To determine if ICT and children are reported in a ‘stylized’ and ‘stereotypical fashion’ consistent with the inventory stage of a moral panic, a control group was created to analyse Queensland newspaper reporting of ICT in general. As previously stated in section 3.3, all articles from the 1st June 2011-1st June 2012 with the key terms ‘ICT’ and/or the words ‘digital media, internet’ were analyzed. The articles were coded into two categories, as either: i) addressing children and or about children or ii) not addressing children. The control group, was all articles not addressing children, and was used to determine whether any differences in reporting styles could be identified between the two groups, to discover if the media representations of children and ICT was conducted in a stylized, stereotypical manner, consistent with the inventory stage of a moral panic. Furthermore, an increase in the presence of claim-makers and their proposed solutions, which results in ‘heightened controls’, could imply the reaction stage of a moral panic. This is discussed in subsection 3.5.4.

3.5.3 Persuasive tone and Sub-categories

The persuasive tone of articles was assessed to determine if there was any over-representation of risks and/or exaggerations of the seriousness of events when discussing children and ICT, in ways that would be consistent with a moral panic. As discussed in subsection 3.5.2, a control group was created to analyse if there was any noticeable differences in reporting styles in Queensland newspaper articles relating to ICT in general and to ICT and children

specifically. An increase in the negative persuasive tone used in articles discussing ICT and children would demonstrate the media's involvement in reporting ICT and children in a stylized and stereotypical manner signifying an 'alarmist response' consistent with the impact stage of a moral panic.

To determine the sub-categories, the key words and persuasive tone within each article were identified and quantified. Both qualitative and quantitative approaches were used to determine if the article was positive, negative or neutral. A positive article contained a higher number of these or similar words in relation to ICT: positive, beneficial/benefit, employability. To determine if the article was negative it contained a higher number of these or similar emotive words: risk, harmful, victims, danger/dangerous. To determine if the article was neutral it contained an even number or has no presence of these or similar emotive words: positive, beneficial/ benefit, employability, risk, harmful, danger/dangerous. The coding of this variable used latent content analysis and is based on how the article represents ICT, which is the central question of this thesis.

3.5.4 Culture of Social Control

To establish if a culture of social control encompassing ICT could be identified, which is consistent with the reaction stage of a moral panic, the presence of socially accredited experts, also known as 'claim-makers'; and control measures leading to heightened controls, were measured. The term 'claim maker' pertains to the presence of, or quotes by, a suggested expert in the article. Social accredited experts were classified as being either an 'expert' where the individual had qualifications in the field, listed in the article, or was a 'self-proclaimed expert', where the person had no listed qualifications or the listed qualification was not specific to the ICT field.

A comparison of reporting styles were made of the control group and articles about or addressing children. An increase in the presence of socially accredited experts would demonstrate 'sensitization', one of three categorised reactions consistent with Cohen's (1980) reaction stage of a moral panic. The reaction stage is the final stage of a moral panic. Discussions no longer focus on the original phenomenon or events, instead focusing on solutions and remedies of the perceived issues. Cohen suggests that 'sensitization' is a result of increased media attention, which creates more vigilant notice and reclassification of images, signs and symbols linked to the event or phenomenon.

To establish if there was a difference in control measures leading to 'heightened controls', a more stringent qualitative analysis was conducted. Articles were coded as having a control measure or not. An article was coded as having a control measure if the article suggested a reaction, direction or response to an event or concern. The direction of the article (to whom the article suggests has responsibility), and with what reaction, was then consequently measured.

Control measures reactions were divided up into three categories: 'government intervention', including school intervention, 'parent responsibility' or 'individual responsibility'. They were then analysed qualitatively for meaning. A comparison was conducted on articles in the control group and articles addressing children. An increase of heightened official social controls, such as increased policing and suggested policy changes in articles relating to children would suggest 'heightened controls' and the presence of a 'social control culture', which is consistent with the reaction stages of Cohen's (1980) stages of a moral panic.

The systematic analysis of this research is best described in a graphical representation, demonstrated in the Figure 3.2, as seen below.

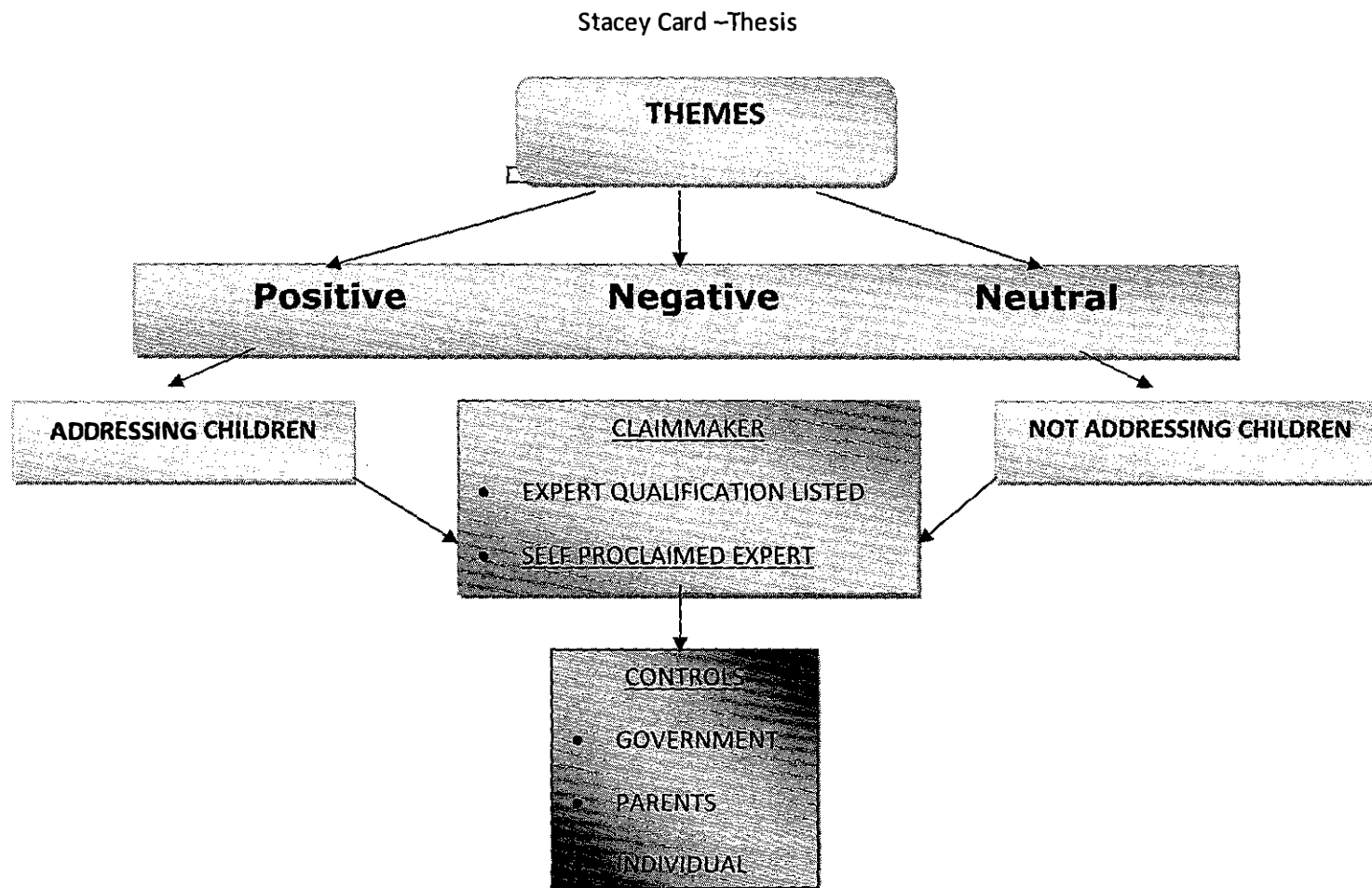


Figure 3.2: Graphical representation of the systematic analysis of this study

3.6 Summary

This chapter revisited the aim of this research investigation and discussed the conceptual framework. Discourse analysis and moral panic was discussed for their theoretical implications, methodology used and analytic importance for this research investigation. Content analysis was argued as a methodology appropriate to determine if a moral panic has been created and fuelled by the Queensland newspaper media, regarding ICT and children. This chapter provided an overview of the research design, data collection and analytic methods. Applications of content analysis and moral panic theory were described in the context of the representation of children and ICT in newspaper articles. The next chapter focuses on the data analysis of the sample.

Chapter 4: Results and Analysis

As previously stated in section 3.3, the sample consisted of $n=246$ articles. Over 200 articles demonstrates a high volume of discourse surrounding the internet, ICT and digital media in Queensland newspapers over a 12 month period. The Courier Mail reported on the internet, ICT and digital media 183 times, which represents 74.39 per cent of articles in the sample. Between the same time period, the Sunday Mail reported on the internet, ICT and digital media 63, times representing the other 25.6 per cent of articles in the sample. Results from the content analysis of the Queensland newspaper articles are analysed and discussed in this chapter. Results are discussed with reference to moral panic theory, and a discussion of these findings follow in chapter five.

The representation of information communication technologies in QLD newspapers are be discussed in section 4.1. This section discusses the appearance of themes in the control group and articles related to ICT and children in subsection 4.1.1. Following this is persuasive tone and sub-categories of themes in subsection 4.1.2. The results of both the control group and articles relating to ICT and children are evaluated and then referenced to moral panic theory. To obtain a greater understanding of the meaning of themes in the articles, section 4.2 decontextualizes articles using latent content analysis. This approach identified three distinctive styles used in articles discussing ICT and children, potential dangers, personal experiences or informative. The classification and impacts of these approaches are examined in this section. Subsection 4.2.1 deliberates on the media's representation of personal experiences, and potential dangers are investigated in subsection 4.2.2. Finally, the data collected to determine if a culture of social control is produced are assessed in section 4.3. Discussions are performed on the presence of claim-makers and their impact on public perception, in subsection 4.3.1. External controls and solutions suggested by claim-makers are assessed in subsection 4.3.2. Comparisons are made between the control groups and articles related to ICT and children to determine any differences and their bearing to moral panic theory. Finally, in section 4.4, an evaluation of results is conducted against the Cohen's (1980) 4 stages of a moral panic.

4.1 Representation of Information Communication Technologies

In this section the results of the information communication technologies are represented in Queensland newspaper media is assessed. The analysis of theme appearance is reported in subsection 4.1.1, followed by the impact of persuasive tone and sub-categories used in themes in subsection 4.1.2. A comparison is made between the control group data and data found in articles related to ICT and children.

4.1.1 Themes

To assess if ICT are believed to be a ‘problem’ or ‘potential threat’, which would be consistent with a moral panic, an analysis of the media’s representation of ICT was conducted. For the purpose of this research, the overriding representation of ICT in the media is demonstrated in the calculation of the frequency of themes that appeared in articles. As previously stated in subsection 3.5.1, as some articles discussed multiple themes the results were calculated under each individual theme heading. This resulted in the 11 themes occurring 231 times in the control group. Percentages were be calculated on the 231 occurrences when analysing the control group (n=205) articles. Software and hardware developments were the most common theme identified, representing 31 per cent (71) of the discourse in all articles related to ICT. Social networking sites were the second most common theme represented in articles, discussed in 25 per cent (58) of the articles, followed closely by the theme economic advantages representing 24 per cent (55) of articles. These are demonstrated in the graphical representation seen in Table 4.1 and Figure 4.1, as seen below.

Table 4.1 Themes represented in control group

Themes	Number of Articles
Software and hardware developments	71
Social networking sites	58
Economic	55
Education/employment	18
Exposure too/ disclosure of inappropriate material	16
Pathological ICT use	5
Gaming	4
Social emotional	2
Vulnerability to predators	1
Filters	1
Cyber bullying and unwanted messages	0
TOTAL	231

The representation in the articles about children or addressing children and ICT (n=41) was significantly different. The 11 themes appeared 50 times and percentages were calculated. The most common theme identified was exposure to and disclosure of inappropriate material, representing 26 per cent (13) of this discourse surrounding children and ICT, followed by educational and employment, being discussed in 16 per cent (8) of articles. The third most discussed theme was vulnerability to predators, discussed in 12 per cent (6) of the articles. These results suggest that claim-makers are focused on perceived related issues surrounding ICT and children and that ICT may be perceived as a problem or potential threat. This is demonstrated in the graphical representation in Table 2 and 3 and in Figure 5, as seen below. As a result of these findings a more extensive analysis, identifying persuasive tone, of these articles will be discussed in the remainder of this chapter.

Table 4.2 Themes represented in articles related to children

Themes	Number of Articles
Exposure to disclosure of inappropriate material	13
Education/employment	8
Vulnerability to predators	6
Gaming	5
Software and hardware developments	5
Social networking sites	4
Pathological ICT use	3
Cyber bullying and Unwanted messages	2
Economic	2
Social emotional	1
Filters	1
TOTAL	50

Table 4.3 provides a comparison of Tables 1 and 2, demonstrating the significant differences in themes representation, presented in the media.

Table 4.3 a comparison of themes represented in articles

THEMES	Articles not Related to Children	Number of Articles Related to Children
Education/employment	8% (18)	16% (8)
Social emotional	1% (2)	2% (1)
Cyber bullying and Unwanted messages	0	4% (2)
Exposure too/ disclosure of inappropriate material	7% (16)	26% (13)
Social networking sites	25% (58)	8% (4)
Vulnerability to predators	4% (1)	12% (6)
Gaming	2% (4)	10% (5)
Pathological ICT use	2% (5)	6% (3)
Filters	4% (1)	2% (1)
Economic	24% (55)	4% (2)
Software and hardware developments	31% (71)	10% (5)
TOTAL	231	50

4.1.2 Persuasive tone and Sub-categories of Articles

To determine if there was over-representation of risks and/or exaggerations of the seriousness of events when discussing children and ICT, which would be consistent with a moral panic, the persuasive tone of articles was assessed. It is the assumption of this investigation that a high level of negative persuasive tone used in articles discussing ICT and children would demonstrate the media's involvement in reporting ICT and children in a stylized and stereotypical manner. The results are presented in Tables 4.4 and 4.5. Table 4.4 describes the results of the control group and removes articles addressing children or about children. Table 4.5 describes the results of articles on children or discussing children and ICT and the persuasive tone related to their sub-categories.

As suggested in subsection 3.4.3, the persuasive tone of articles was identified using qualitative and quantitative approaches. A positive article contained a higher number of these or similar words in relation to ICT: positive, beneficial/ benefit, employability. To establish if an article was negative it contained a higher number of these or similar emotive words: risk, harmful, victims, danger/dangerous. If the article was neutral it contained an even number or had no presence of these or similar emotive words: positive, beneficial/ benefit, employability, risk, harmful, danger/dangerous. Finally, the coding of the persuasive tone was based strongly on how the article represents ICT, which is the main question of this thesis.

Table 4.4 Themes and persuasion represented in articles not related to children

CONTROL GROUP				
THEMES	TIMES DISCUSSED	CONTEXT, PERSUASION AND DIRECTION OF ARTICLES		
		Negative	Positive	Neutral
Education/employment	18	0	13	5
Social/emotional	2	1	0	1
Cyber bullying	0	0	0	0
Exposure to disclosure of inappropriate material	16	11	0	5
Social networking sites	58	22	6	30
Vulnerability to predators	1	0	0	1
Gaming	4	2	1	1
Pathological ICT use	5	3	0	2
Filters	1	0	0	1
Economic	55	7	14	34
Software and hardware developments	71	13	13	45
Totals	231	25.5% (59)	20.3% (47)	54.1% (125)

Percentages were calculated on the overall 231 themes when analysing the control group (n=205) articles. As can be seen in Table 3, of the 231 themes discussed in articles on ICT not including children, 54 per cent (125) of themes were found to be neutral. In 20 per cent (47) the persuasive tone was positive and in 26 per cent (59) the persuasive tone was negative. These results demonstrate that more than half of articles discussing ICT used neutral persuasive tone, symbolising that after having read the article the reader's perception of ICT would be neither positive nor negative. With more than one in five articles using positive persuasive tone, these results are not suggestive that ICT are perceived to be a 'problem' or 'potential threat', which would be consistent of a moral panic, therefore the Queensland

newspaper media's representation of ICT in general is not consistent with a moral panic. As seen in Table 4.4, one in four articles were found to use negative persuasive tone.

Livingstone and Helsper (2008) suggest ICT have no borders or boundaries, thus some negative depictions of ICT have the capacity to give attention to an event that is far beyond its importance. An example can be found in an article linking the internet with the dissemination of personal information through police transmissions. The article suggests ICT have enabled the unregulated distribution of personal information. The article states "all Queenslanders are at risk of their personal information being stolen" (Sunday Mail, 2012, Jan. 15, p. 47, 1p.). This heading suggests that issues relating to the internet have the capacity to affect all Queensland individuals putting them at risk. Overall, however, the Queensland newspapers appear to present ICT in mostly a neutral or positive frame.

Table 4.5 Themes and persuasion represented in articles related to children

ARTICLES RELATED TO CHILDREN		(Representing a total 41 articles)		
THEMES	TIMES DISCUSSED	CONTEXT, PERSUASION AND DIRECTION OF ARTICLES		
		Negative	Positive	Neutral
Education/employment	8	3	3	2
Social emotional	1	0	1	0
Cyber bullying	2	2	0	0
Exposure to disclosure of inappropriate material	13	12	0	1
Social networking sites	4	2	2	0
Vulnerability to predators	6	6	0	0
Gaming	5	3	0	2
Pathological ICT use	3	2	0	1
Filters	1	0	0	1
Economic	2	1	0	1
Software and hardware developments	5	3	0	2
Totals	50	68% (34)	12 % (6)	20% (10)

Percentages were calculated on the 50 themes when analysing articles about ICT and children (n=41) articles. As seen in Table 4.5, of the 50 discussed themes in the 41 articles on ICT and children, only one in five, 20 per cent (10) of themes used neutral persuasive tone, which is significantly lower than the 54.1 per cent, neutral persuasive tone used in the control group. Sixty-eight per cent (34) of articles were found to represent ICT with a negative tone when addressing children and ICT, which is significantly higher than the one in four articles using negative persuasive tone in the control group. This result establishes a substantial difference

in the reporting styles of Queensland newspapers when discussing ICT and children and ICT in general, as seen in Table 4.6 below.

Table 4.6 Comparison of themes and persuasion represented in articles

Persuasive Tone	Children & ICT	Control Group
Negative	68% (34)	25% (59)
Positive	12% (6)	20% (47)
Neutral	20% (10)	54% (125)

These results suggest that media reporting of ICT and children may be presented in a stylized, stereotypical way, which is consistent with the impact stage of a moral panic. Additionally, only 12 per cent (6) of the articles used positive persuasive tone when discussing ICT and children, demonstrating an unbalanced approach to reporting and the discourses around ICT and children. For example, an article shared a parent's personal account of having "spent \$3000 on counselling after their five-year old son was exposed to internet porn, by other neighbourhood children, themselves still in primary school" (Sunday Mail, 2012, May. 20, p. 29, 1p). This article is extremely powerful as it not only implies that young children are at risk, but it depicts the parent as an actively involved parent who is well informed of the dangers, yet his son was still susceptible to the risk. Increasing concerns were also found in an article suggesting "Children were now watching pornography at school and sharing files with other students" (Sunday Mail, 2012, May. 6, p.10, 1p). This article has the ability to provoke unease and hostility as it suggests that the dangers of the internet have penetrated schools, leaving children at greater risk. Johansson (2000) advocates dangers towards children often provoke moral panics.

Although these results are limited in that they only provide a narrow description of the content in the articles, Table 4.6 shows a 42.5 per cent increase in articles representing ICT negatively when discussing ICT and children compared to ICT in general. As suggested earlier, it is believed that this increase and all negative representation of ICT may have the

potential to fuel a moral panic. These results are also important as they establish the media's representation of ICT as a potential threat to children and identify the presence of a media driven crusade which is consistent with a moral panic.

4.2 Decontextualization of Articles

As previously mentioned, the analysis of this thesis applies both manifest content analysis and latent content analysis. The manifest content analysis calculates the frequency and percentages of the themes and their sub-categories in the media (Wilson, 2011). However, to make meaning of the themes and to identify if some articles have the capacity to give attention to an event far beyond its importance, latent content analysis was used (Wilson, 2011). By decontextualizing articles using latent content analysis a greater understanding of the message within the persuasive data can be obtained. This subsection examines the themes more specifically, with examples from articles used to illustrate results.

The analysis of themes represented in the articles identified (n=50) suggests ICT were responsible for making children physically weaker (Sunday Mail, 2011, Jun. 3. p3.p1) and wasting away teenagers' brains' (Sunday Mail, 2011, Jul. 5. p3.p1). Exposure to and dissemination of inappropriate material was the most common theme identified in the Queensland newspaper articles discussing ICT and children, emerging 13 times. This theme was represented negatively in 92 per cent (12) of articles over the 12 month time period. Articles discussing exposure to and dissemination of inappropriate material claimed ICT were responsible for the dissemination of pornography, sexting and inciting shocking crazes (such as young people asphyxiating each other or themselves to achieve a high, at times resulting in death). Internet pornography was also identified as a major problem, being discussed seven times in articles. Studies have shown that one in four children admitted to being exposed to unwanted pictures of naked people or people having sex online, although most reported they were unaffected by the inappropriate material (Wolak, Finkelhor & Mitchell, 2004). Nevertheless these articles are consistent with Bryant and Bryant's (2005) and Potter and Potter's (2001) finding that parents have concerns about the spread of sexually explicit material online.

Decontextualizing the articles using latent content analysis detected three identifiable approaches used to discuss to ICT and children in articles: those that focus on potential dangers, those that account for a personal experience, and those that present as information. Articles that highlight potential dangers were classified as articles that discussed an ICT related issue, which may or may not exist, yet were perceived as a potential threat. Articles classified as personal experiences were found to focus on a particular victim or victims' account of an event or events related to ICT. Articles presented as information identified as neutral provided the reader with factual information related to ICT and children.

Of the (n=41) articles discussing ICT and children, personal experience was the most common approach used, representing 51 per cent (21) of all articles in the sample. Articles that presented ICT as a potential danger were identified in 22 per cent (9) of articles. Articles classified as informative were represented in 27 per cent (11) of the discourse surrounding ICT and children in the Queensland newspaper media. The data collected on frequency of types of articles are demonstrated in Figure 4.3, as seen below.

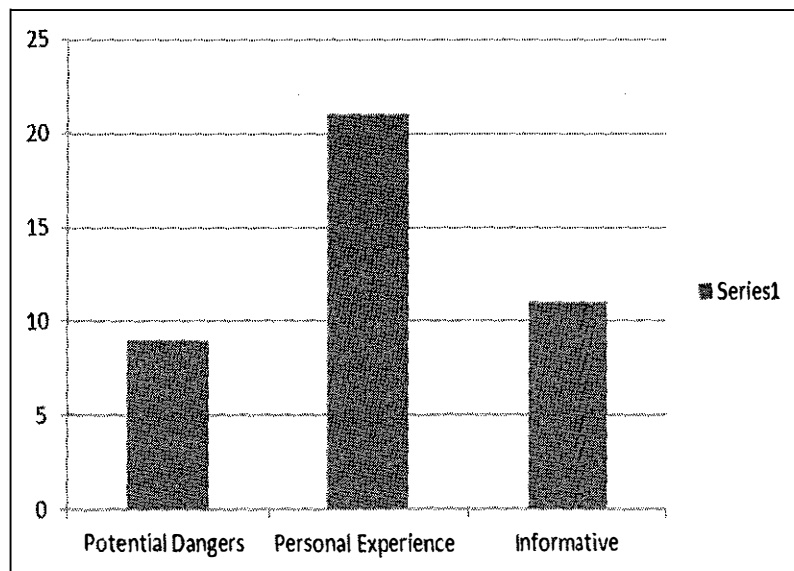


Figure 4.3: Graphical representation of the different types of articles related to children

The high rate of 'personal experiences' reported in the sample is consistent with a moral panic, as claim-makers, thus "social accredited experts", are shown to be cited in more than half of the articles discussing children and ICT, to explain the phenomenon. This could also be linked with the inventory stage of a moral panic, as the conditions of victims are determined with the stereotypical reporting of events. Additionally, articles classified as a potential danger are consistent with the warning of a moral panic as they focus on an issue that may not exist, yet is perceived as a potential threat. With this understanding, a more stringent analysis of article approaches used is conducted in the following subsections.

4.2.1 Media Representation of Personal Experiences

Articles that represent a bad personal experience were often found to use surveys and statistics and social accredited experts to legitimise claims. However, in articles that relate to children, parents were repeatedly used to give personal accounts of events. The victims were often presented as young, innocent and like any other child, emphasising that all children are susceptible to the threat and increasing the perception of randomness of victims.

Victimization plays a large role in the formation of a moral panic. Often the victim is described as a happy child, having unlimited potential and coming from a supportive home. For example, an article found in the Courier Mail, "Grieving parents warn others of internet-inspired fad" (Courier Mail, 2011, Oct. 27, p. 3 .p1) (see appendix A), tells of a parent's personal account of their 15 year old child who was found dead after participating in an internet inspired choking game. The article focuses on the victim's young age on numerous occasions, even discussing her upcoming 16th birthday. The victim is described as a "normal, happy teen and dedicated private school student who liked to spend time in her room on her computer" (p. 3). The victim is described as not knowing the "the thrill could kill her" and that "there was no warning" (p. 3). These statements imply that the event could not be foreseen. The attention drawn to the victim's innocence and her private school education implies she should have been protected from the outcome. The article repeatedly discusses the location of the victim's death and gives a graphic representation of the parents' report that they found their daughter, stating that she "left her bedroom door open while she was doing

it” (p. 3). The description of events leads the reader to believe that a child’s bedroom can be a dangerous place, and the reinforcement of the negative consequences of ICT infiltrating seemingly innocent aspects of society incites an emotional response from the reader.

It appears from this analysis of the language in these articles that Queensland newspaper media over-inflate the perceived threat of ICT through the use of personalised events that are dramatically represented to the public to incite feelings of concern and worry. When defining a moral panic it is important to remember that moral panics can be informative and it is not suggested that ICT are without risk. However, it is the objective of this thesis to analyse how Queensland newspaper media represents ICT and children to the public. Research into moral panic are not simply to ascertain their existence, causational issues, prevention or control; they are designed to account for the appearance and continuance by the moral entrepreneurs. The out of proportion, melodramatic, over-reporting of ICT and their risks to children by the media acts as a ‘framing device’ that grossly exaggerates the seriousness of the threat. This reporting can influence parent’s attitudes and perceptions and thus children’s access to ICT and supervision techniques used by parents.

Most significantly indicated in the data were the high number of negatively represented articles on ICT and children and the small number 2.4 per cent (6) of all 246 articles that inform readers of the positive effects of ICT on children. These results are statistically significant when identifying the existence of a moral panic, especially as the Queensland media’s representation of ICT and children is inconsistent with the research. As has been reported earlier, ICT do come with risks, but the Queensland media’s high number of negative representations and limited positive representations under-represents the extensive research suggesting that ICT is now critical for children’s’ educational and career success (Clark & Ernst, 2009; Hargittai and Shafer, 2006; Hilton, 2006; Hsu & Wang, 2010). As discussed earlier in this thesis, research does suggest that ICT can have a positive effect on wellbeing (Clarke, 2009; Kraut et al., 2002; Valkenburg & Jochen, 2009) and that the social aspects of the internet have shown to improve the self-esteem of children (Steinfeld, Ellison,

& Lampe, 2008; Valkenburg & Jochen, 2009). These positive representations have been shown to be rare representations in the Queensland media examined.

4.2.2 Potential Dangers

Articles that represent potential dangers were often found to present experts and self-proclaimed experts to legitimise their claims, even if the ‘expert knowledge’ stated was given more authority than it should have been given. Furthermore, the perception of randomness of victims suggested anyone could be at risk and threats were often represented in nameless surveys and statistics frequently quoted. Additionally, highly emotive language that presented a false impression of increased risk was often used. For example, an article discussing pornography as a ‘potential danger’ in the Sunday Mail, had the headline “KIDS CORRUPTED IN SUMT-PHONE AGE- Primary children viewing sex films” (Sunday Mail, 2012, May 6, p. 10) (see appendix B). This article’s headline suggests children in primary school are being inundated with pornography. The journalist uses an Australian addiction specialist to support claims and suggests that experts have warned of an increase in porn addiction in children, as mobile ICT became more prominent in society. The article however, does not give any specific indication of the number of children affected, choosing to use the term “some young people”. Nevertheless, from the leading statements, it is most likely the reader will assume pornography addiction is on the rise.

The same article states that ICT have created “24-hour access to hardcore material” and that children are watching pornography at school. These statements have the potential to provoke unease suggesting the threat is infiltrating all aspects of society. The article further states “porn merchants were targeting children” and “43 per cent of regular pornography users were first introduced to explicit images between the ages of 11 and 13” (Sunday Mail, 2012, May 6, p.10). The media often uses percentages to influence the perceptions of readers; for example, this also indicates that 57 per cent of regular pornography users were not introduced to explicit images till later in life. This statistic gives no indication that younger individuals

who are unintentionally exposed to inappropriate images will become addicted to pornography.

The article goes on to say ‘some’ young users were watching explicit material for up to 10 hours per day and that ‘some’ young people had racked up bills of up to \$9000 on stolen credit cards. The addiction specialist supports this statement, acknowledging he has treated children as young as 14 years of age. The lack of information on specific numbers of children implicated and the suggestion that exposure to inappropriate material may lead to pornography addiction and stealing decontextualizes the original events and leaves the reader focused on perceived related issues and their control measures. The article finishes by implying that parents, teachers and the community need to work together to give children the skills to use technology safely, and both parents and educators needed to be involved with sexual education of children. However, the article does not provide any substantive evidence that ICT are unsafe nor that unintentional exposure to inappropriate images is a threat to young people’s sexual or mental health.

Similarly, an article found in the Sunday Mail “Web crims target kids- Identity details stolen from social networks” (Sunday Mail, 2011, Oct.2, p.9) (see appendix C) creates panic from its opening statement stating “experts calling for internet security to be taught in school” (p.9). This heading suggests to the reader, that the internet poses a security risk and that security concerns have the potential to affect children, something that needs to be remedied. The article goes on to inform the reader that “children are the new targets for organised crime gangs because they share too much information about their personal lives” (p.9). This comment contradicts current research that suggests children are becoming more discreet with personal information and that children are restricting access to their personal information (Rogers, Taylor, Cunning Jones & Taylor, 2006). Nonetheless, the Queensland fraud squad superintendent is brought into the debate as an expert to support the journalist’s claims, stating that “crooks were using computers to harvest huge quantities of information from young people” (p.9). The superintendent suggests that crime gangs are collecting data with

information and photographs of children and waiting until they turn 18 years of age, and applying for loans and credit cards in their name.

The claims by this expert have the potential to incite heightened levels of concern. Experts are regularly used to provide legitimacy to claims and are often perceived by the reader as having substantive knowledge in the area. The expert in this article implies many children affected have not yet been identified and many may not be aware that they have been targeted until far into the future. This prolongs concern as the reader is unsure if they or their child has been targeted and will not know for many years. This potential concern inflates the problem to the readers and suggests the threat could undoubtedly upset social order. Furthermore, the randomness of individuals affected will heighten concern as any person with personal information on the internet maybe at risk, insinuating the threat has infiltrated society leaving many at risk. This is consistent with warning stage of Cohen's (2002) moral panic theory.

4.3 Analysis of culture of social control

As has been explained in subsection 3.4 a culture of social control is identified by an increase of 'socially accredited experts' and the increased presence of control measures, which can lead to 'heightened controls' that are consistent with a moral panic theory. The following subsections 4.3.1 and 4.3.2 detail the results obtained from the control group and articles about ICT and children establishing a culture of social control.

4.3.1 Claim-makers

Articles were assessed for the creation of a 'culture of social control'. The main aim of a moral panic is to promote fear through control, using reoccurring, decontextualized, stereotypical news coverage (Cohen, 1980). With this understanding one strategy employed to establish if a 'culture of social control' was identified was the presence of socially

accredited experts and right-thinking ‘claim-makers’, which is consistent with the reaction stage of a moral panic. The term ‘expert’ implies an expertise of the field and is often used by journalists to strengthen claims. A high volume of claim-makers in articles and/or an increase of socially accredited experts in articles addressing ICT and children, compared to the control group, establishes a heightened presence of right-thinking ‘claim-makers’ a view consistent with Cohen (1980) definition of a moral panic.

As discussed in subsection 3.4.4 the term ‘claim maker’ relates to the presence of quotes by a suggested expert in the article. Socially accredited experts were classified as being either an ‘expert’ where the individual had qualifications in the field, listed in the article, or was a ‘self-proclaimed expert’, where the person had no listed qualifications or the listed qualification was not specific to the ICT field. Table 4.7 demonstrates the results of the socially accredited experts for the control group, as seen below.

Table 4.7 Social accredited experts represented in control group

CONTROL GROUP			
Themes	Times discussed	Social Accredited Expert	
		Expert	Self-proclaimed experts
Software and hardware developments	71	4	13
Social networking sites	58	4	10
Economic	55	4	12
Education/employment	18	4	6
Exposure to disclosure of inappropriate material	16	3	2
Pathological ICT use	5	0	1
Gaming	4	0	1
Social emotional	2	1	0
Vulnerability to predators	1	0	0
Filters	1	0	0
Cyber bullying and Unwanted messages	0	0	0
TOTALS	231	8.6% (20)	19.4%(45)

As can be seen in Table 4.7, claim-makers, in the presence of socially accredited experts, were identified in 28 per cent (65) of themes in the control group, which is less than one third of the articles. When discussing the themes, self-proclaimed experts were the most predominantly used claim-maker, appearing in the discussions of 19.4 per cent (45) of articles. Expert opinions were present in 8.6 per cent of discussions. This is a relatively small number overall. The data from the control group, however, provides a basis to establish whether there is a heightened presence of right-thinking 'claim-makers' in articles about children and ICT, which is consistent with Cohen's (1980) definition of a moral panic.

Table 4.8 Social accredited experts represented in articles related to children

CHILDREN AND ICT			
Themes	Times discussed	Social Accredited Expert	
		Expert	Self-proclaimed experts
Exposure to disclosure of inappropriate material	13	2	6
Education/employment	8	1	1
Vulnerability to predators	6	0	3
Gaming	5	2	1
Software and hardware developments	5	1	1
Social networking sites	4	0	3
Pathological ICT use	3	1	0
Cyber bullying and Unwanted messages	2	0	0
Economic	2	0	1
Social emotional	1	0	0
Filters	1	1	0
TOTALS	50	16% (8)	32% (16)

Table 4.8 demonstrates that the socially accredited experts are represented in 48 per cent (24) of themes discussing ICT and children. This is somewhat higher than the 28 per cent (65) indicated in the control group. A comparison of the use of socially accredited experts within the control and ICT and children groups is shown in Table 4.9.

Table 4.9 Comparison of socially accredited experts represented in articles

Social Accredited Experts	ICT & Children	Control Group
Expert	16% (8)	8.6% (20)
Self-proclaimed experts	32% (16)	19.4% (45)
TOTAL	48% (24)	28% (65)

Overall, the presence of claim-makers being used to make meaning of the ICT phenomenon was used in 32 per cent (89) of articles in the Queensland newspaper media. Furthermore, 48 per cent (24) of newspaper articles discussing ICT and children have the presence of a claim-maker. Of the 24 articles, related to ICT and children, which had a socially accredited experts, self-proclaimed experts were the most frequently used, being represented in 32 per cent of articles. As previously stated it is the belief, of this thesis, that some experts used to support journalist claims, maybe given more credibility than deserved. It is also important to note that individuals who had listed qualifications on ICT and children were only represented in 3.2 per cent (8) of all the 246 articles over the time period. Articles listed many types of self-proclaimed experts from parents, teachers, and nameless researchers to a Lad's magazine editor, to support their claims.

An example of this can be found in an article in the Sunday Mail 'Loaded lament- Lads' mag boss 'sorry' for porn' (Sunday Mail, 2012, Jun.10, p.4) (see appendix D) has an editor from the magazine Lads confess he regrets using 'soft porn' in the magazine. He goes on to say that his magazine "must have made it more acceptable for young men to dive into the murky waters of harder stuff on the internet" (p. 4). However this self-proclaimed expert's role as an editor does not legitimise this statement. The journalist tries to authorise the self-proclaimed expert's claims with the opening statement "the longest-serving editor", suggesting he has credibility in the area, also mentioning that the editor is now a father. Nevertheless the article provides no evidence that the magazine Lad's or even if soft porn leads to more explicit material viewing (Sunday Mail, 2012, Jun.10, p.4).

Journalists frequently used self-proclaimed experts through the presentation of results of nameless surveys. An example is in Sunday Mails 'Richer kids prone to more online risk' (Sunday Mail, 2012, Mar.25, p.22) which states "Middle-class children are more likely to be harmed by internet use than those in poorer households. They are more proven to be bullied, seeing porn, receiving sexual messages and indulging in risky behaviours such as meeting up with people they have only met online, researcher said." (p.22) Nonetheless the article gives no indication of who the researcher is, or what field they specialise in.

Later in the article the journalist quotes: "the study's author said middle-class children were at more risk as they were more likely to know their way around the internet and to have a computer in their bedroom, or smartphone" (p.22). Conversely there is no information on the survey itself, sample used, size of study, age of participants, what type of study or even which country the study was conducted in. Furthermore, by excluding significant information about how the survey was conducted restricts the reader's ability to access the reliability and validity of the research. Additionally, the journalist uses an accredited expert's name in the closing sentence of the article stating "Sonia Livingstone, professor of social policy at the London School of Economics, called on parents to talk to their children about their internet use" (Sunday Mail, 2012, Mar.25, p.22). The use of this expert's name leads the reader to believe that the professor is affiliated with the research, however the article never directly links the professor with the research cited.

As was discussed in subsection 3.4.4 Culture of social control, an identifiable element of a moral panic is when discussions no longer focus on the original phenomenon or events, instead focusing on solutions and remedies of the perceived issues. Therefore the next subsection of this investigation will distinguish what, if any, solutions the socially accredited experts pronounced in the articles.

4.3.2 Controls

As has already been established, through the high negative representation of ICT and children, the media largely represents children's use of ICT as a social 'problem'. As discussed in subsection 3.4.4, articles were coded as having a control measure if the article suggested a reaction, direction or response to an event or concern. The direction of the article (to whom the article suggests has responsibility) and with what reaction was measured. Control measure reactions were broken into three categories: 'Government intervention', 'parent responsibility' or 'individual responsibility'. As seen in Table 4.10, the control group analysis located two categories: 'government intervention' and 'individual responsibility'. However, as can be seen in Table 4.11, articles about children and ICT located three categories: 'government intervention', 'individual responsibility' and 'parent responsibility'. The three 'solutions' pronounced for children and ICT are revealing. The increase of social control categories suggests a possible increase of heightened controls, and changes in official social controls such as increased policing. A detailed investigation of the control group and articles about children and ICT will be covered in this subsection.

Table 4.10 Control measures represented in control group

CONTROL GROUP			
Themes	Times discussed	CONTROLS	
		Gov.	Individuals
Education/employment	18	2	2
social emotional	2	0	0
Cyber bullying and Unwanted messages	0	0	0
Exposure to disclosure of inappropriate material	16	5	0
Social networking sites	58	3	4
Vulnerability to predators	1	0	0
Gaming	4	1	0
Pathological ICT use	5	0	0
Filters	1	0	0
Economic	55	2	0
Software and hardware developments	71	8	1
TOTALS	231	9% (21)	3% (7)

Overall, socially accredited experts pronounced their diagnoses and solutions with a controlled measure response in 12 per cent (28) of articles in the control group. Articles with control measures suggested favoured official social controls, such as increasing policing and policy changes in 9 per cent (21) of articles. For example, one article in the Sunday Mail stated: “time for the Government to step in and put a blanket block on internet porn” (Sunday Mail, 2012, May 6, p.21, 1p). In only 3 per cent of articles was individual responsibility suggested as a response to ICT use. Although there is some use of social control in the articles presented, Table 4.9 shows there is minimal presence of social controls related to ICT as less than one in ten articles suggest an external control measure. This is not consistent with the reaction stage of moral panic.

Table 4.10 shows of the results the examination of controls within articles discussing ICT and children. These results show that social accredited experts pronounced their diagnoses and solutions with a control response in 74 per cent (37) of discussion in the articles related to children. This result demonstrates a 6 per cent increase in suggested control measures in articles discussing ICT and children than in articles that relate to ICT in general. It is important to note that, of all the 281 themes represented in the sample, only 0.7 per cent (2) suggested children take individual responsibility for their ICT use. The dramatic increase in external controlled measures suggested for ICT and children suggests that there is greater social concern regarding ICT and children, as seen in Table 4.11. Table 4.12 shows a direct comparison of controls for the control and the ICT with children groups.

Table 4.11 Control measures represented in articles related to children

CHILDREN AND ICT				
Themes	Times discussed	CONTROLS		
		Gov.	Individuals	Parents
Education/employment	8	4	0	1
social emotional	1	0	0	0
Cyber bullying and Unwanted messages	2	0	1	0
Exposure to disclosure of inappropriate material	13	6	0	5
Social networking sites	4	2	0	3
Vulnerability to predators	6	2	0	3
Gaming	5	1	0	2
Pathological ICT use	3	1	0	0
Filters	1	1	0	0
Economic	2	1	0	1
Software and hardware developments	5	2	0	1
TOTALS	50	40% (20)	2% (1)	32% (16)

Table 4.12 Comparison of control measures represented in articles

Controls	ICT & Children	Control Group
Government	40% (20)	9% (21)
Individual	2% (1)	3% (7)
Parents	32% (16)	NA
TOTAL	74% (37)	12% (28)

An example of a call for a dramatic increase in external controls can be found in the Courier Mail article: “Sexting laid bare - Call for earlier education” (Courier Mail, 2011, Jun.22, p.4). The article draws on a study conducted with 33,000 young Australians, and asserts that “one in five Australian girls aged 18 has sent nude or semi-nude pictures of themselves over the internet” (p.4) and recommends cyber-safety education needs to start “as early as kindergarten to stop dangerous online practices” (p.4). The journalist’s assertion that a control response is undeniably required to “stop dangerous online practices” implies that

there is a perceived threat to individuals. Two experts are presented in the article to reinforce the journalist's claims. First is a nameless 'self-proclaimed expert' from 'Boys Town' who states: "sexting could lead to poor self-esteem and self-image" (p.4) and, second, a Professor from Flinders University who states: "parents and educators needed to come to terms with the trend" (p.4). Although the specific dangers are never fully addressed in the article, the article implies such actions may expose significant risk to young adults.

The article also demonstrates how statistics are provided and are taken to be reliable and valid without any substantive evidence. For example, the journalist claims "sexting has become normal behaviour in adolescent culture" (p.4), but neither the article nor the data presented in the survey supports this statement. The statement is spoken as fact and it is possible that the reader will adopt the belief that most young ICT users are participating in the activity. Furthermore, the article concludes with statistics from the study, stating "a third of children.....felt unsafe online" and "two-thirds of 13-18 year-olds thought cyber-bullying was increasing" (p.4). The journalist's assertion of the perceived dangers and the focus on young people suggest the issue is widespread and increases the public's concern. Sensationalising the number of individuals involved and reasserting the perceived threat implies ICT are dangerous to all children, and can lead to a moral panic.

Overall, the most common type of Government intervention suggested was linked to the education system. Table 4.11 and 4.12 indicates that Government interventions were recommended for children in 40 per cent of articles. These heightened controls are consistent with the reaction stages of moral panic. Of the twenty articles suggesting Government intervention, one suggested stricter policy, suggesting the Government may need to put a blanket ban on pornography (Sunday Mail, 2012, May 6, p.11, 1p.). Increased teacher awareness was advised in two articles, whereas developing new educational programs and increasing ICT access to educate and inform children of risks associated with ICT was suggested in 35 per cent (7) of articles. Other education focused programs included: improving sex education programs to reduce effects of pornography (Sunday Mail, 2012, May 6, p.10); teach 'net-iqutte' and supervise (Sunday Mail, 2012, Mar 25, p.25); teach safe

internet practise to protect children (Sunday Mail, 2012, May. 20, p.22); develop intervention for internet choking games (Sunday Mail, 2012, Jun. 3, p.5.pl); develop digital games in the classroom and increase teacher proficiency (Courier Mail, 2012, Jul 26, p.38.pl; Courier Mail, 2012, Apr 3, p.36.pl; Courier Mail, 2011, Aug 2, p.38.pl); and increase the use of ICT in lessons (Courier Mail, 2011, Aug 9, p.40.pl).

The Queensland newspaper media's focus on the education system and subsequent suggestions that it is responsible to intervene and safeguard children, through the development of programs, leads the reader to believe that ICT have created a societal unrest, that children are at risk, and Government intervention is required to remedy the situation. This focus can mislead parents, leaving them unsure of their role in safeguarding children. Parents using a form of external intervention was suggested in 32 per cent (16) of articles relating to children, although parent involvement was suggested in only 1.06 per cent (3) of articles and parent and child communication were only suggested in 1.06 per cent (3) of articles over the 12 month time period (Sunday Mail, 2012, May.6, p.10; Sunday Mail, 2012, May.20, p.22.pl; Sunday Mail, 2012, May.29,p.29.pl; Courier Mail, 2011, Oct. 27, p.3.pl; Sunday Mail, 2011, Oct.17, p.61.pl; Courier Mail, 2011, Jun. 22, p.4.pl). This finding is particularly interesting considering the most significant factor in reducing inappropriate internet behaviours has been found to be frequent communication between parents and young people (Van den Eijnden, et.al, 2010). Also, parents who are actively involved in their child's everyday lives have been found to increase the use of the ICT for educational purposes in children (Heim, et.al, 2007).

Increase use of monitoring software was suggested once (Courier Mail, 2011, Jun. 12, p.49.pl). This suggestion is at odds with research suggesting that no filtering software packages are 100 per cent effective in blocking inappropriate material (Bryant & Bryant, 2005). All other articles advocated for increased parental awareness.

4.4 Four Stages of Moral Panic and Results

Goode and Ben-Yehuda (2009) suggests that moral panics often arise in periods of social change that bring about transformations in established ways of life. Often a moral panic derives from the uncertainty of the change, and fears about how the change will impact on society. Furthermore, a fundamental characteristic of Cohen's research was the fact that threats were not easily identified and could infiltrate all aspects of society, provoking unease and hostility (Thompson, 1998).

It has been demonstrated that ICT have changed the way people gather information, communicate, entertain and do business. By their very nature and rapid uptake, ICT have infiltrated all aspects of society. Concerns in the media over ICT risks and educational benefits for children can create anxiety, leaving society unsure how to best support children and with whom the responsibility lies. Consequently there is a need to discover if a moral panic about ICT and children has been created and fuelled by the Queensland newspaper media. The negative stereotypical and stylized representations of events, which is a defining component of moral panics, in this case children and ICT, could create a self-fulfilling prophecy that may escalate social fear. Misinformation and misdirection to the public can cause reactions and social controls that detract from the real issues surrounding children and their ICT behaviours, in this case, by providing the public with inappropriate control measures that may increase risks and reduce benefits of ICT, thus escalating the problem.

As stated in section 1.3, the main aim of this research is to *"To determine using discourse analysis, how ICT and children are being represented in the Queensland newspaper media, and to determine if a moral panic has developed around children and ICT."* The next section in this chapter will examine the results of the discourse analysis and evaluate them against Cohen's (1980) four stages of a moral panic.

As discussed in chapter two, the four stages of moral panic are detectable elements however, they are not regarded as linear or continuous. Society is believed not to be in a singular stage at one point in time, and the elements are considered “circular and amplifying” (Cohen, 1980, p24). The purpose of this section is not to identify at which singular stage the moral panic is in, but to determine if a moral panic has been created and fuelled by Queensland newspaper media. The results are evaluated against the detectable elements of a moral panic as a criterion, to determine if a moral panic has formed around ICT and children.

4.4.1 The warning stage

As seen in section 2.9, the warning stage of a moral panic is characterized by the public’s concern about an issue or phenomenon that may or may not exist, yet is perceived as a potential threat. In this stage the phenomenon is defined in basic terms, yet the problem is inflated enough to suggest that the issue will undoubtedly upset social order. Occurring usually after at least one incident has occurred, warnings become “out of proportion to the imminent threat” (Cohen, 1980, p.146), and increasingly complicated and formalized as time passes.

It is the belief of this investigation that ICT do pose some risk to children although moral panic research asserts attention should be placed on the media debate and ‘proportionality’ of the panic, not its existence, causational issues, prevention or control (Cohen, 1980). To ascertain if warnings are out of proportion to the imminent threat, a control group was utilised in this study to gauge differences in reporting styles when discussing ICT in general and ICT and children. As ICT have risks to all individuals, reporting styles should be similar. The investigation found this was not to be the case as there were substantial differences among articles discussing ICT in general and articles about ICT and children.

The most common theme in articles discussing ICT and children was exposure to and disclosure of inappropriate material, which was represented negatively in 92 per cent of articles in this theme. The most common theme used to discuss ICT in general was hardware and software developments, which were only represented negatively in 18 per cent of articles. This observation suggests that articles about ICT and children are not focused on the original phenomenon or events, instead focusing on perceived related issues, a view consistent with a moral panic.

The investigation uncovered a considerable increase in the negative persuasive tone used in themes discussing ICT and children, compared to the control group. Furthermore, there were significant increases in socially accredited experts or ‘claim-makers’ used in articles about ICT and children and, consequently, a sizable increase in control measures possibly as a reaction to the perceived threat. This finding suggests a ‘culture of social control’, also consistent with a moral panic. These differences are discussed in detail in the following subsections.

For the purpose of this research, public perception was not determined by a public survey, but rather was coded subjectively as to whether, after having read the article, the reader’s perception of ICT would be positive, negative or neutral. Key words were identified to determine persuasive tone, and the coding of this variable was strongly based on how the article presents. Results found in this investigation strongly support the presence of the warning stage of a moral panic on children and ICT. The investigation discovered a 43 per cent increase of negative persuasive tone used in articles addressing children and ICT. Furthermore, only one in five articles about ICT and children were reported neutrally, compared to 54 per cent of articles reported neutrally in the control group. This finding demonstrates the journalists’ preference of using emotive tone to inflate the issues and sway the reader’s perception of ICT and children. Articles discussing ICT and children only used positive persuasive tone in 12 per cent of articles. These differences in reporting would suggest that the public are likely to perceive ICT as a potential threat to children.

4.4.2 The impact stage

As seen in section 2.9, the impact stage is a period of disorganisation and alarmist response and occurs immediately after the predicted event. Individual responses vary, however individuals often mimic emotions on those around them creating an emotional group mentality (Cohen, 1980).

The dramatic difference in reporting depictions of ICT and children compared to ICT in general suggests an alarmist response as demonstrated in the high negative representation of ICT and children (68 per cent), in comparison to the minimal amount of negative representation of ICT in general (25 per cent), as previously established in the warning stage. An alarmist response can be identified in the overriding image of ICT in the media, as demonstrated through the frequency of themes, discussed in articles. As suggested in subsection 3.5.1, a high number of articles pertaining to negative themes such as cyber bullying, unwanted messages and vulnerability to predators, would be consistent with an emotive response; however a high number of positive articles or articles discussing ICT and/or their developments would not be consistent with an emotive response. The investigation revealed that when analysing the control group, software and hardware developments were the most common theme identified, representing 31 per cent of the discourse in all articles related to ICT. The second most common theme social networking discussed in 25 per cent of articles, and third was economic advantages, represented in 24 per cent of articles. However in articles addressing children and ICT the most common theme was exposure too and disclosure of inappropriate material, representing 26 per cent of this discourse surrounding children and ICT, followed by the educational and employment discourse discussed in 16 per cent of articles. The third most discussed theme was vulnerability to predators, discussed in 12 per cent of articles. The high representation of negative themes in articles addressing ICT and children is suggestive of an emotive response, as articles no longer focus on ICT but instead focusing on perceived related issues of ICT.

Supporting the theory of an emotive response around ICT and children is the high number of control measures suggested in articles. A control measure was defined in Subsection 4.3.2 as a reaction, direction or response to an event or concern. In 88 per cent of articles discussing ICT and children, an external control measure was suggested. Control measures were only present in 14 per cent of articles discussing ICT in general.

4.4.3 The inventory stage

The inventory stage is the most complex of all the stages and it occurs when the public evaluates the severity of the phenomenon, what has occurred and the condition of victims. Media are largely involved with the stylized and stereotypical reporting of the phenomenon's event(s) and allegations. Vague perceptions are created about the event(s) developing a stylized understanding of the issue. The media presents the assumption that the event(s) will inevitably reoccur and such predictions often become self-fulfilling prophesies, thus escalating the public's fears about the issue. Finally, a symbolic understanding of words and images of the event incite ideas and public emotion. Based on the data, the public are highly likely to view ICT as a threat to children, given the high representation of negative themes and the high practice of negative persuasive tone used to represent ICT and children. The condition of victims and the 'stylized and stereotypical reporting' of children and ICT used by the media is best demonstrated through the latent content analysis conducted in section 4.2.

Personal experience was the most common approach used, representing 51.2 per cent of all discourse on ICT and children. Articles that presented a potential danger of ICT were present in 22 per cent of articles. The high rate of 'personal experiences' reported in the articles about ICT and children are consistent with the inventory stage of a moral panic, as the conditions of victims are determined through personal reflection of events. The media was found to dramatically represent and over-inflate the perceived threats of ICT through these personalised accounts to incite feelings of concern and worry. Additionally, articles classified as a potential danger are consistent with the warning stage of a moral panic as they focus on an issue that may not exist, yet is perceived as a potential threat.

The stylized and stereotypical reporting of ICT and children was found to be demonstrated in many ways. Parents, teachers and other self-proclaimed experts were used to legitimise claims with children often portrayed as young, innocent and like any other child, emphasising that all children are vulnerable to the threat, which increases the perception of randomness of ICT victims. Victimization plays a large role in the formation of a moral panic. Articles that found to represent potential dangers often presented experts and self-proclaimed experts to legitimise their claims, even if the 'expert knowledge' stated was given more authority than it should.

The perception of randomness, classified as potential dangers for victims, suggested anyone could be at risk and represented threats through frequently quoting statistics from nameless surveys. The articles were often found to use highly emotive language present a false impression of increased risk. The melodramatic reporting of negative events, intended to increase fear and incite the need for control, is best demonstrated in the increased number of articles suggesting a control measure and the high use of claim-makers in articles about ICT and children. The appearance of claim-makers is discussed in detail in the next stage 4, the reaction stage.

4.4.4 The reaction stage

The reaction stage is the final stage of Cohen's (1980) moral panic theory. According to Cohen, individuals try to understand and make meaning of the phenomenon of events and constructed messages. Discussions no longer focus on the original phenomenon or events, instead focusing on perceived related issues, specifically solutions and remedies to the issues.

Individuals' attempts to understand and make meaning of the impact that ICT have on children were established through the high number of articles describing personal experiences. Personal accounts are used by media to personalise issues and, as confirmed in 4.4.3, the inventory stage, personal experience was the most common approach used to discuss the

issues and events surrounding ICT and children, appearing in more than one in two articles. Individuals were found to relive their personal account of events. Through melodramatic representations and over-inflation of events, give the reader a false impression of randomness and the high frequency of reported, negative events. Potential dangers were represented in one in five articles about ICT and children. Claim-makers suggested ICT could be a grave risk to children, but rarely provided any substantiative evidence to support these claims.

An important component of the reaction stage is a ‘culture of social control’, which is defined as the increased use of ‘socially accredited experts’, claim-makers in articles, and the increased presence of control measures. Socially accredited experts were classified as either being an ‘expert’ where the individual had qualifications in the field listed in the article or was a ‘self-proclaimed expert’, where the person had no listed qualifications or the listed qualification was not specific to the ICT field. The distinction was made as the term ‘expert’ implies a person with expertise in the field and is often used by journalist to strengthen claims, however the results suggest some experts were given more credibility than their expertise suggests.

The use of a socially accredited expert was present in 42 per cent of themes discussing ICT and children, but socially accredited experts were only found in the control group in 28 per cent of articles. This finding demonstrates an increase in claim-makers supports a culture of social control. Articles discussing ICT and children favoured self-proclaimed experts, being present in more than one in four articles. Individuals classified as experts in the field of ICT and children were only representative of 3.2 per cent (8) of all articles over the time period. This demonstrates the medias’ representation of ICT and children is most often not supported by substantiated research, or gathered by professionals in the field. Social accredited experts pronounced their diagnoses and solutions with a control response in 87.8 per cent (36) of the 41 articles related to children, a 74.2 per cent increase in suggested control measures in articles discussing ICT and children than articles that relate to ICT in general. The high number of control measures recommended for children suggests the media largely represents

children's use of ICT as a social problem, which is consistent with all 4 stages of a moral panic.

The type of control measures suggested in articles were quantified to establish if 'heightened controls' were insinuated for children and ICT, establishing the reaction stage of a moral panic. Three categories of control measures were identified: 'government intervention', 'parent responsibility' and 'individual responsibility'. The control group analysis located only the presence of two categories: government intervention or individual responsibility. Of the articles suggesting a control measure for children and ICT, external control measures were suggested in 72 per cent of articles by putting accountability on either Government interventions or parent responsibility. Only one article, on cyber bullying, suggested children should take individual responsibility for their actions. The most common form of control measure for children and ICT was government interventions, represented in 40 per cent of themes. The most frequent form found was the development of new educational programs and increasing ICT access in schools to educate and inform children of risks associated with ICT, implied in 35 per cent (7) of articles. Increasing teacher awareness was also advised in two articles. Overwhelmingly the educational system was held responsible for safeguarding children, and yet there is no substantive evidence suggesting school based education programs are effective in reducing ICT risk to children or changing in risk taking behaviours.

The most significant factor identified in research in reducing inappropriate ICT behaviours of children was frequent communication between parents and young people (Van den Eijnden, et.al, 2010). Parents who are actively involved in their child's everyday lives were found to increase the use of the ICT for educational purposes in children (Heim, et.al, 2007) and quality relationships between parents and children have shown to safeguard young people from ICT misuse. Parental intervention was suggested as a control measure in 32 per cent of articles relating to children, but parent involvement was suggested in only 1.06 per cent (3) of articles, and parent and child communication was only suggested in 1.06 per cent (3) of the articles over the 12 month time period (Sunday Mail, 2012, May 6,p.10; Sunday Mail, 2012, May 20, p.22.p1; Sunday Mail, 2012, May 29,p.29.p1; Courier Mail, 2011, Oct 27, p.3.p1;

Sunday Mail, 2011, Oct.17,p 61.p1; Courier Mail, 2011, Jun 22,p.4.pl). As can be seen the results of the current study supports the presence of all four stages of Cohen's Moral Panic Theory in relation to ICT and children, confirming a moral panic has been created and fuelled by the Queensland newspaper media on children and ICT.

4.5 Summary

This Chapter has analysed the data on the Queensland newspaper media linking findings to Cohen's (1980) moral panic theory. The analysis identified significant differences in the representation of themes in articles discussing ICT in general and ICT and children. A key element of a moral panic is the representation of the phenomenon as a 'problem' or 'potential threat'. To identify if ICT were perceived as a problem or potential threat, persuasive tone used in articles was analysed, identifying a significant increase in the negative representation of ICT in articles discussing ICT and children compared to the control group. This suggests that the media's reporting of ICT and children may be presented in a stylized, stereotypical way, which is consistent with the impact stage of a moral panic.

To make further meaning this chapter decontextualized articles using latent content analysis, detecting identifiable approaches: A high rate of personal experiences was found in articles discussing ICT and children and is believed to be consistent with a moral panic as claim-makers, or 'socially accredited experts', were used in more than half of the articles discussing children and ICT. This data demonstrates the inventory stage of a moral panic, as the conditions of victims are being determined with the possible stereotypical reporting of events. Articles classifying ICT as a potential danger are consistent with the warning stage of a moral panic, as focus was placed on an issue that may not exist, yet is perceived as a potential threat.

The presence of claim-makers and controls was quantified to establish if heightened controls could be identified for children and ICT. Again, articles about ICT and children were significantly different than the control group, with socially accredited experts represented

more often and increased number of control measures suggested in articles discussing children and ICT than the control group. The combination of these two results demonstrates elements of the reaction stage of moral panic.

The investigation evaluated the results against Cohen 4 stages of a moral panic, determining the presence of all four stages, establishing a moral panic appears to have been created and fuelled by the Queensland newspaper media. The key findings of the research investigation along with the future and theoretical implications will be discussed in the following concluding chapter.

Chapter 5: Conclusions

In this final Chapter, the results of this investigation are summarised, theoretical implications addressed and implications for future research acknowledged. Section 5.1 will examine the rationale of the investigation, evaluating if the aim has been achieved, and if the research questions were addressed. The theoretical implications of this research investigation are discussed in section 5.2, followed by the research limitations in section 5.3. Implications for future research are documented in section 5.4 and, finally, conclusions are drawn from the investigation in section 5.5.

5.1 Review of research aim

In academic and public debates, there has been grave concern about the safety and negative effects of ICT, particularly with children (McColgan & Giardino, 2005; Puazon-Zazik & Park, 2010). These concerns have been related to online harassment (Ybarra, Mitchell, Wolak, Finkelhor &, 2006), cyber bullying (O'Reilly & O'Neil, 2008) behavioural problems (Mikani, Szwedo, Allen, Evans & Hare, 2010), access to inappropriate material (Wolak, Finkelhor & Mitchell, 2004), social networking sites (Moreno, 2010) and links between depression and internet addiction (Ha, Kim, Bae, Bae, Kim, Sim, Lyoon, & Cho (2007).

Nevertheless, society has observed a continuous growth in ICT use commercially and domestically, with 99.6 per cent of children reporting ICT access at school and 95.7 per cent also reporting ICT and internet access at home (Fleming, Greentree, Cocotti-Muller, Elias and Morrison, 2006). Adding to the ICT debate is a growing body of research that suggests that ICT create enormous benefits for users. ICT have been linked to positive connections to social involvement and increased wellbeing (Kraut, Kiesler, Boneva, Cummings, Henderson, & Crawford, 2002; Valkenburg & Jochen, 2009). ICT have also shown to improve student motivation (MacDonald, 2008; Mullamaa, 2010), increase collaboration between students and allow for greater differentiation in the classrooms (Balanskat, Blamire & Kefala, 2006).

Educational researchers and governmental organisations are now considering the benefits of ICT for users. It is perceived that having the skills to efficiently and effectively use ICT is now paramount for children, as ICT are believed to be critical for educational and career success (Hargittai & Shafer, 2006), with State and Federal Governments allocating considerable funds to improve ICT access commercially, domestically and in educational settings (Australian Government Department of Education, Employment and Workplace Relations, 2011; MCEETYA, 2008; Queensland Government, 2011).

The conflicting messages of the values and harm of ICT to the public combined with the information provided by the media, causes confusion and nervousness, creating a group anxiety about children and ICT. The aim of this study was to make a small contribution to the understanding of how ICT are represented to the public in order to determine the public's perception of children and ICT. The Queensland newspapers media's representation of ICT was analysed using a form of discourse analysis, content analysis, to examine how they present ICT and children and whether their presentation can be described as a moral panic.

According to Cohen (1980), moral panic accounts for societal reactions to something disturbing or threatening. Moral panic develops through the melodramatic media discourse that creates disproportional fear in society and is identified through four consistent stages. After analysing and evaluating the data in this study, it appears that the method in which the Queensland newspaper media represents ICT and children is consistent with Cohen's Moral Panic theory and may influence the creation and maintenance of a moral panic.

The aim of this investigation, as defined in section 1.3, was:

To determine, using discourse analysis, how ICT and children are being represented in the Queensland newspaper media, and to determine if a moral panic has developed around children and ICT.

The research aim has been achieved, determining a moral panic has indeed been created and fuelled by Queensland newspaper media. This investigation determined that all 4 stages of a moral panic were evident in the discourse pertaining to ICT and children.

This investigation addressed the following sub questions:

- 1. To what extent does the media represent children's internet and ICT use in a stylized stereotypical manner?*
- 2. To what extent does the media create a 'social control culture' through heightened controls as the response to children and their ICT use?*
- 3. What is the nature of the moral panic developed around children and ICT?*

These three research questions have been addressed. Question one was explored in chapter two and three of this study. There were a significant number of articles using exaggerated discourse that over-represent events and issues surrounding ICT and children. This misleading discourse, which persistently represents potential dangers and negative personal experiences of children to the public, created a stylized stereotypical representation of children and ICT. This was evident through the inclusion of specific information; for example, statistics and graphic personal representations that incite an emotional response by the reader pertaining to ICT and children. The omissions of significant information, such as

specific individuals and numbers affected creates a feeling of vulnerability as the issues seem more random and wide spread than they actually are. Journalists sensationalised events through their reporting, and using authority figures to support often unsubstantial claims. Persistently presenting ICT as something that should be feared and suggesting that related issues require remedy through increased government interventions, such as the Education system, with potentially escalated societal fear of ICT.

Research Question Two asked, does the media create a 'social control culture' through heightened controls as the response to children and their ICT use? Chapter 4 sections 3 confirmed a social control culture created through heightened controls suggested for children using ICT. It was evident through the 20 per cent increased use of 'socially accredited experts', claim-makers and the 60 per cent increased presence of external control measures in articles addressing children and ICT. Many types of self-proclaimed experts were used however, individuals who were considered experts, individuals who had listed qualifications on ICT and children, were only present in 3.2 per cent (8) of all discussions over the time period. This finding demonstrates a relatively small number of qualified claim-makers used in articles discussing ICT and children, and so the public creates their perceptions of ICT and children predominately from the opinion of unqualified claim-makers.

At this point it is important to remember moral panics can be informative and there is much research to suggest children are at risk when using ICT. Nevertheless there is also ample research suggesting ICT are beneficial to children socially and emotionally, and necessary for educational and career success, this finding was not visible strongly in the data. Through discourse, parents and educators develop their perceptions about ICT and the impact on children. It is because of this and the tendency of moral panics to become self-fulfilling prophecies, caused by the media's assumptions and ongoing suggestions that events will inevitably reoccur, which gives good reason for concern.

Research suggests that parental supervision has been recognised as a protecting factor for reducing risks of children's online activity (Heim, et.al, 2007; Livingstone & Helsper, 2008; Van den Eijnden, et.l, 2010). However this research finding is not frequently advocated in the media. Quality relationships between parents and children have shown to protect children from internet misuse and increase children's use of ICT for educational purposes (Heim, et.al, 2007). Furthermore, the most substantial factor in reducing inappropriate internet behaviours is frequent communication between parents and young people (Van den Eijnden, et.al, 2010). Nevertheless, this was only reported as a suggestion in 1.06 per cent (3) articles to the Queensland public over the 12 month time period. In addition, the ongoing suggestions that the educational system is responsible for safeguarding young people is misleading to parents and educators as there is no substantive evidence suggesting school based education programs are effective in reducing ICT risk to children nor changing risk taking behaviours of children.

The final research question asked *what is the nature of the moral panic developed around children and ICT?* This question was discussed in chapter 4.4, with the identification of all 4 stages of Cohen's (1980) moral panic theory. Confirming Cohen's (1980) definition of moral panic:

A condition, episode, person or group of persons emerges to become defined as a threat to societal values and interests; its nature is presented in a stylized and stereotypical fashion by the mass media; the moral barricades are manned by editors, bishops, politicians and other right-thinking people; socially accredited experts pronounce their diagnoses and solutions; ways of coping are evolved or (more often) resorted to; the condition then disappears, submerges or deteriorates and becomes more visible (Cohen, 1980, p9)

In summary, the moral panic discourse created by the Queensland Sunday Mail and the Courier Mail, through the disproportionately negative representation of themes and the increase use of social accredited experts to establish heightened controls for children, creates a stylized and stereotypical reporting of children and ICT. This reporting has the capacity to submerge the real issues surrounding children and ICT, by recommending ineffective control measures. This approach may put children in greater risk of ICT, as implied risks become self-fulfilling prophecies, escalating the public's fears about the issue, which is consistent with moral panic theory. These finding confirms that the Queensland papers present articles in a way that may lead to moral panic regarding ICT and children. Cohen's (1980) definition of a moral panic applies to the public's perception of children and Information Communication Technologies.

5.2 Theoretical Implications

The findings of these results of this study support Cohen's (1980) theory of moral panic in practice. This study found that the Queensland newspaper media fuelled a moral panic characterized by:

- a) Increased frequency of negative persuasive tone used in articles related to ICT and children;
- b) decrease frequency of neutral and positive persuasive tone used in articles related to ICT and children;
- c) the stylized stereotypical reporting of articles related to ICT and children;
- d) an increased use of claim-makers and external control measures in articles related to ICT and children.

5.3 Limitations

This chapter has discussed the findings of this study and how they relate to moral panic theory. Since this study only focused on one moral panic in two leading newspapers, it does not represent all moral panics, nor does it reflect the discourse in all newspaper media. Nevertheless it does have implications for future research into how ICT and children are represented in the media and future theoretical development into moral panic theory, considering the findings of this study are consistent with moral panic theory. The scope of this research investigation focused on the analysis of Queensland newspaper media representation of ICT and children between June 2011 and June 2012. One limitation of this study is that it did not include other forms of media representation, for example national newspapers, other news mediums such as television or radio and free local papers available to Queenslanders. Due to time restraints, it is out of the scope of this research to conduct such an investigation and further research is warranted.

Another limitation of this investigation is that, as the Queensland newspaper media is not the only form of communication to the public on children and ICT, it misses other important variables in determining public perception. A public perception in this investigation was not obtained via public surveys or through interviews, but rather it was gauged on how the newspaper articles represent ICT and children to the public. Further research is required to assess whether the public perceive ICT and children in the same way as the media portraying it. Earlier research has indicated that parents have concerns about children and ICT (Bryant & Bryant, 2005; McColgan & Giardino, 2005; Puazon-Zazik & Park, 2010; Potter and Potter, 2001) and they are choosing ineffective regulation techniques to safeguard children. Also there is strong suggestion from the media that external control measures are required, namely the education system to safeguard children, however there is little evidence to support their effectiveness. Furthermore Cohen (2002) suggests moral panic theory should investigate the media's debate and 'proportionality' of the panic. Whilst an 'emotional group mentality' is a definable component of a moral panic and the documented reactions of parents and the public

would suggest an ‘emotional group mentality’ it is not a required component of determining the presence of a moral panic.

A major element of a moral panic is the media’s melodramatic discourse that exaggerates the seriousness of the problem and creates disproportionate public concern. As risks associated with ICT have the potential to affect all individuals, a control group was used to ascertain if the media exaggerates the seriousness of the problem and creates disproportionate public concern when focused on children. This was found to be the case. However, as there are risks associated with ICT, it is difficult to define appropriate levels of concern and there is some suggestion that children are at heightened risk of ICT threats given their age (O’Reilly & O’Neil, 2008; Subrahmanyam, Smahel & Greenfield, 2006). As ICT use continues to grow and develop in all aspects of society, ongoing research into its full effect on children is required. The implications of this research investigation are detailed in the next section of this chapter.

5.4 Implications for future research:

Even though newspaper media is not the only form of media discourse surrounding ICT, the analysis of such a medium is imperative. Without these studies, the effect that the newspaper media has on fuelling and creating moral panic would go unrevealed. Investigating such an impact exposes the proportionality and continuance of a moral panic by claim-makers by ensuring their accountability through determining if claims are substantiated.

As with all studies, there are limitations and implications for future research. This study used every attempt to locate and analyse all articles from Queensland’s two leading newspapers over a 12 month time period. The reasons for choosing the two newspapers and sample for this study were discussed in chapter 3. One possible extension of this study could involve all major news media such as televised news broadcasts and magazines and a comprehensive investigation of newspaper media nationally, which is available to Queenslanders. By

choosing to do a national study of all media it would be possible to see if results found in this study were similar to those found in another study with other news media or if these results only relate to Queensland's newspaper media.

Another possible extension of this thesis would involve a longer time period (such as 5 years) looking at frequency of articles and placement of articles to determine if there were changes in reporting with more sensationalised articles placed closer to the front of the newspaper. Similarly, a longer time period could allow for an investigation of changes in policing and policy to determine if there was a relationship between the newspaper media discourse and changes to policies more accurately. Additionally an examination of these policing and policy changes would allow for an inquiry into whether or not these changes by policy makers and politicians are a result of the moral panic observed in this study. Furthermore, research into policy makers and politicians and their actions and beliefs would allow for future studies into 'exploitation' (Cohen, 2002), which is the analysis of the direct or indirect commercial gain resulting from panic.

5.5 Conclusions

With the growing use of ICT commercially and domestically, children need to learn how to use these technologies effectively and safely. However, how to do this is a matter of great debate both publically and academically. This investigation aimed to make a small contribution to the understanding of how ICT are represented to the public, by examining the representation of ICT and children in Queensland newspaper media, to determine whether a moral panic (as represented in the newspaper media) had developed around children and ICT. The results of a content analysis, support the theory that a moral panic has been created and fuelled by the Queensland newspapers media on children and ICT. This was evident in the media's representation of ICT and children.

Rather than focusing on ICT themselves, the moral panic focuses on the issues that surround ICT and children, over representing ICT negatively to readers when discussing children and overestimating the requirement for external control measures when addressing ICT and children. What is interesting to note is that results discussing ICT in general provided relatively equal representation of ICT, that is, approximately equal positive and negative representation with over 50 per cent of articles being presented neutrally, but this did not show a parallel with articles pertaining to ICT and children (20 per cent neutral).

Whilst it is impossible to measure the full impact of the media's representation of ICT and children, the media is influencing people's belief, and fears about ICT and children. This fear may influence parents favouring ineffective regulation techniques to safeguard children and changes to educational policies. The illumination of the media's information must be placed on news sources to restrict moral panics before they become established in policies and programs. In this case, before external controls, the education system is responsible for safeguarding children, enforcing parents underestimating their influence and responsibility. This investigation has both theoretical implications and implications for future research. As the public perceptions of ICT impacts on children's access to ICT, the benefits of ICT and the development and effectiveness of control measures used to safeguard children needs to be better managed. It is only through factual reporting that the public can make informative decisions on how to best support children. Parents need to be aware of their profound influence on their children's ICT behaviours and parents, and educators need to work together to support children with their ICT use.

References

- Australian Curriculum, Assessment and Reporting Authority (ACARA). (2012). General Capabilities. (ACARA).
- Adams. T. (2010). The plugged in parent: what you should know about kids and computers. *Journal of Family Communication*. Doi: 10.1207/S15327698Jfc0202_04
- Ajzenstadt, M. (2009). Moral panic and neo-liberalism. *British Journal Criminology*. 49. 68-87.
- Apple, M. (1996). Power, meaning and identity: critical sociology of education in the United States. *British Journal of Education*. 17 (2), 125-144.
- Aslanidou, S., & Menexes, G. (2008). Youth and the internet: Uses and practices in the home. *Computer and Education*, 51 (3), 1375-1391.
- Atheide, D. (2009). Moral panic: sociological concept to public discourse. *Crime Media Culture*. 5 (1). 79-99. doi 10.1177/17416590081020631
- Avci, A., Ozcan N., Uzel, M., Celik, G. & Tahiroglu, A. (2008). Internet use among Turkish adolescents. *Cyberpsychology & Behaviour*. 11 (5). 537-543
- Australian Bureau of Statistics. (2010). *Internet activity in Australia, 2010*. Retrieved January, 2011 from <http://www.abs.gov.au/ausstats/abs@.nsf/mf/8153.0/>
- Australian Department of Finance and Administration (2007). Meeting the demand for ICT skills in the Australian Public service- today and for the future. Retrieved October 7, 2011 from http://www.finance.gov.au/publications/meeting-demand-for-ictskills/docs/ICT_Skills_Taskforce_Report.pdf
- Australian Government Department of Broadband Communication and the Digital Economy, (2009). New National Broadband Network. Retrieved March 7, 2012 from http://www.minister.dbcde.gov.au/media/media_releases/2009/022
- Australian Government Department of Education, Employment and Workplace Relations (2010). Experience the Digital Education Revolution. Retrieved February, 2011 from <http://www.deewr.gov.au/Schooling/DigitalEducationRevolution/Pages/default.aspx>
- Baerveldt, C., Bunkers, H., De Winter, M & Kooistra, J. (1998). Assessing a moral panic relating to crime and drugs policy in the Netherlands: towards a testable theory. *Crime, Law and Social change* 29 (1). 31-47.

- Balanskat, A., Blamire, R., & Kefala, S. (2006). *The ICT impact report: A review of studies of ICT impacts on school in Europe*. European Schoolnet. Education and Culture
- Bamford, A. (2004). Cyber-Bullying. AHISA Pastoral Care. National Conference.
- Bandura, A. (1989). Human agency in social cognitive theory. *American Psychologist*, 44 (9), 1175- 1184.
- Baszander, I & Dodier, N. (2004). *Qualitative research: theory, method and practice*. London: Sage.
- Becker, H. (1966). *Outsiders: studies in the Sociology of Deviance*. NewYork: The Free Press
- Bhat, C. (2008). Cyber bullying: overview and strategies for school counsellors, guidance officers, and all school personnel. *Australian Journal of guidance & Counselling*. 18 (1), 53-66.
- Bryant, P., & Bryant, A. (2005). Adolescents and the internet. *Adolescent Medicine Clinics*. 16 (2). 413-426.
- Campbell, A. (2005). Cyber bullying: An old problem in a new guise? *Australian Journal of Guidance and Counselling* 15 (1). 68-76.
- Castells, M. (2001) Internet Galaxy, Reflections of the internet Business and Society. *Oxford University Press*
- Centre For Educational Research and Innovation. (2010). Are the New Millennium of Learners Making the Grade? Technology use and Educational Performance in PISA: Publishing. Retrieved September 19, 2011 from Electronic Book Library database.
- Chin-Chung, T. (2007). The relationship between internet perceptions and preferences towards internet-based learning environment. *British Journal of Educational Technology*. 38 (1). 167- 170.
- Chien-Hsin, L., Shong-Lin, L., & Chin-Pi, W. (2009). The effects of parental monitoring and leisure boredom on adolescents' internet addiction. *Adolescence*. 44 (176). 994-1004.
- Chien-Huang, L., & Shu-Fen, Y. (2008). Adolescent internet usage in Taiwan: exploring gender difference. *Adolescence* 43 (170) 317- 332.
- Clarke, B., (2009). Friends forever: how young adolescents use social-networking sites. *IEEE Intelligent Systems*, 24 (6), 22-26.

- Clark, A., & Ernst, J. (2009). Gaming in technology education: the study of gaming can teach life skills for the twenty-first century that employers want....these include analytical thinking team building, multitasking, and problem solving under duress. *The Technology Teacher*, 68 (5), p21.
- Cohen, S. (1980). *Folks devils and moral panics. The creation of Mods and Rockers*. London: Routledge.
- Cohen, S. (2002). *Folks devils and moral panics. The creation of Mods and Rockers*. (3rd ed.). London: Routledge.
- Cottrell, L., Xiaoming, L., Harris, C., D'Alessandri, D., Atkins, M., Richards, B. (2003). Parent and adolescent perceptions of parental monitoring and adolescent. *Parenting*, 3. (3). 179-195.
- Courier Mail. (2012, Apr 3). Adobe digital school collection, *Courier Mail*, p. 36.
- Courier Mail. (2011, Dec 29). Child-porn appeal rejected, *Courier Mail*, p. 6.
- Courier Mail. (2011, Jun 4). Convicted 'troller' walks after appeal, *Courier Mail*, p. 23.
- Courier Mail. (2011, Jul 7). Court snag in coach's sex case, *Courier Mail*, p. 12.
- Courier Mail. (2006, May 5). Digital Kids in the Classroom, *Courier Mail*, p. 44.
- Courier Mail. (2011, Aug 2). Digital games in the Classroom, *Courier Mail*, p. 38.
- Courier Mail. (2012, Apr 3). Education Generation P, *Courier Mail*, p. 36.
- Courier Mail. (2007, Jul 17). Giving education a second life. *Courier Mail*, P 40.
- Courier Mail. (2011, Oct 27). Grieving parents warn of deadly internet fad. *Courier Mail*, P 3.
- Courier Mail. (2012, Jun 9). Internet ban for architect. *Courier Mail*, P 17.
- Courier Mail. (2011, Sep 3). Internet generation is physically weaker. *Courier Mail*, P 38.
- Courier Mail. (2011, Dec 16). Kids Corrupted in smut-phone age-Primary children viewing sex films. *Courier Mail*, p.5.
- Courier Mail. (2012, Mar 6). Online Bullying. *Courier Mail*, p.36.
- Courier Mail. (2011, Nov 28). Net misuse a health issue. *Courier Mail*, p.3.
- Courier Mail. (2011, Sep 15). Net site to safe kids-Parents empowered to combat predators. *Courier Mail*, p.3.
- Courier Mail. (2011, Jul 7). Parents, not teachers, should be the ones to arm children with life skills. *Courier Mail*, p.24.
- Courier Mail. (2011, Jun 22). Sexting laid bare- Call for earlier education. *Courier Mail*, p.4.

- Courier Mail. (2011, Jul 26). Social media for educators. *Courier Mail*, p.38.
- Courier Mail. (2012, Apr 9). shortfall of ICT experts hits schools. *Courier Mail*, p.11.
- Courier Mail. (2011, Aug 9). Teachers talking technology. *Courier Mail*, p.40.
- Courier Mail. (2011, Oct 27). Teenage girl killed by 'chocking game' craze- Grieving parents warn others of internet-inspired fad. *Courier Mail*, p.3.
- Courier Mail. (2012, Mar 31). 'Wolf howl' gives man away. *Courier Mail*, p.17.
- Donnelly, K. (2007). Content Analysis. Teacher Information. *Culture Scope*. 84, 21.
- Creswell, (2008). *Education research: Planning, conducting, and evaluating quantitative qualitative research*. Pearson: Upper Saddle River, NJ.
- Ellison. N., Vitak, J., Steinfield. C., Gray. R., Lampe. C. (2011). *Negotiating Privacy Concerns and Social Capital Needs in a Social Media*. Springer: Heidelberg.
- Encyclopaedia of Law and Higher Education (2009). Cyberbullying. DOI: 10.4135/9781412969024
- Eslea, M. & Rees, J. (2001). At what age are children most likely to be bullied at school. *Wiley InterScience Journal of aggressive Behaviour*, 27 (6), 419-429.
- Fleming, M., Greentree, S., Cocotti-Muller, D, Elias, K & Morrison, S. (2006). Safety in cyberspace: Adolescents' safety and exposure online. *Youth & Society*. 38 (2) 135-154. DOI: 10.1177/0044118X06287858
- Ford, A. (2009). School liability: Holding middle schools liable for cyber-bullying despite their implementation of internet usage contracts. *Journal of Law and Education*. 38 (3), 535-543.
- Foundation for Young Australians. (2008). How young people are faring 2008- Foundation for Young Australians. Author. Retrieved October 23, 2011 from http://www.fya.org.au/downloads/FYA_HYPAFReport_ONLINE_68pp.pdf.
- Frost. J. & Gardiner, S. (2005). Binge drinking: the latest moral panic? *Safer Communities*, 4 (5). 5-7
- Goode, E. & Ben-Yehuda (2010). *Moral Panics: The Social Construct of Deviance*. (3rd ed.). United Kingdom: Wiley-Blackwell.
- Goode, E. & Ben-Yehuda (1994). *Moral Panics: The Social Construct of Deviance*. (2nd ed.). United Kingdom: Wiley-Blackwell.
- Greenfield, P., & Zheng, Y. (2006). Children, adolescents, and the internet: a new field of inquiry in developmental psychology. *The American Psychological Association*. 42 (3). 391-394.

- Gunter, B. (2008) Media violence is there a case for causality. *Behavioural Scientist*, 51 (8), 1061- 1122.
- Ha, J., Kim, S., Bae, S., Bae, S., Kim, H., Sim, M., Lyoon, I & Cho, S. (2007). Depression and internet addiction in adolescents. *Psychopathology*. 424-430. doi: 10.1159/00010742
- Hall, S., Critcher, C., Jefferson, T., Clarke, J. & Roberts, B. (1978). *Policing the Crisis: Mugging, the State and Law and Order*. London: Macmillan.
- Hargittai, E., & Shafer, S. (2006). Difference in actual and perceived online skills: the role of gender. *Social Science Quarterly*. 87 (2), 432-448.
- Heim, J., Brandtzaeg, P., Kaare, B., Endestad, T., & Torgersen, L. (2007). Children usage of media technologies and psychosocial factors. *New Media & Society*. 9 (3), 425-454, doi: 10.1177/1461444807076971
- Hibino, A. & Nagata, M. (2006). Biotechnology in the Japanese media: comparative analysis of newspaper articles on genetic engineering in Japan and Europe. *Asian Journal of Social Psychology*. 9 12-23. doi:10.1111/j.1367-2223.2006.00176.x
- Hiebert, R. (1999). *Impact of Mass Media Current issues*. (4 th ed.). New York: Longman.
- Hilton, R. (2006). Gaming as an education tool. *Young Consumers*. 7 (2), 14-19.
- Horton- Salway, M. (2010). Repertoires of ADHD in UK newspaper media. *Health*. 15 (5). 533-549. doi: 10.1177/1363459310389626
- Hsu, H. & Wang, S. (2010). Using gaming literacies to cultivate new literacies. *Simulation and Gaming* 41 (3). 400 DOI:10.1177/1046878109355361
- Hughes, R., & Hans, J. (2001). Computers, the internet, and families: a review of the role new technology play in family life. *Journal of family issues*. 22 (6), 776-790. doi:10.1177/019251301022006006
- Hunt, A. (1997). Moral panic and moral language in the media. *British Journal of Sociology*. 48 (4). 629-648.
- Innes, M (2005). A short history of the idea of moral panic. *Media, Culture*. 1 (1). 106-111.
- Internet world stats (2010). Internet usage stats usage and population statistics. Retrieved November 27, 2013. from <http://www.internetworldstats.com/stats6.htm>
- Johansson, T. (2000). Moral panics revisited. *Young*. 8 (1). 22-35.
- Johnstone. B. (2002). *Discourse Analysis*. Massachusetts. Blackwell.
- Kawachi, I., Berkman, L. (2006). Social ties and mental health. *Urban Journal*, 77 (3) p458-467.

- Khoo, L. (2008). Parental awareness and monitoring of adolescent internet use. *Current Psychology*. 27 (4), 217-233.
- Kraut, R., Kiesler, S., Boneva, B., Cummings, J., Henderson, V., & Crawford, A. (2002). Internet paradox revisited. *Journal of social issues*. 58 1, 49-74.
- Kraut, R., Patterson, M., Lundmark, V., Kiesler, S., Mukopadhyay, T., & Scherlis, W. (1998). Internet paradox: a social technology that reduces social involvement and psychological well-being? *American Psychologist*, 53, 1017-1031.
- Liau, A., Khoo, A & Ang, P. (2008). Parental awareness and monitoring of adolescent internet use. *Current Psychology*. 27 (4). 217-233.
- Livingstone, S and Bober, M. (2004). Taking up opportunities? children's use of the internet for education, communication and participation. *E-Learning*1 (3). 395.
- Livingstone, S., & Helsper, J. (2008). Parents mediation of children internet use. *Journal of Broadcasting and Electronic Media*, 52 (4), 581-599.
- Luke, A. (1997). The material effects of the word: apologies, 'stolen children' and public discourse. *Discourse: Studies in the cultural Politics of Education*, 18 (3) 343-368.
- MacDonald, R. (2008). Professional development for information communication technology integration: identifying and supporting a community of practice through design-based research. *Journal of Research on Technology in Education* 40 (4). 429-446.
- Margaryan, A., Littejohn, A. & Vojt, G. (2010). Are digital natives a myth or reality? university students' use of digital technologies. *Computers & Education*. 56 (2011) 429-440 doi:10.1016/j.compedu.2010.09.004
- MCEETYA. (2008). *Melbourne Declaration on Educational Goals for Young Australians*. Melbourne: Ministerial Council on Education, Employment, Training and Youth Affairs Retrieved from http://www.mceecdya.edu.au/mceecdya/melbourne_declaration.25979.html.
- Mc Colgan, M & Giardino, A. (2005). Internet poses multiple risks to children and adolescents, *Pediatrics Annuals*, 34 (5) 405-414.
- Mikami, A., Szwedlo, D., Allen, J., Evans, M., & Hare, A. (2010). Adolescent peer relationship and behaviour problems predict young adults communication and social networking websites. *Developmental Psychology*. 46 (1), 46-56.
doi: 10.1037/a0017420
- Miller, T. (2003). A very childish moral panic: Ritalin. *Journal of Medical Humanities*, 24 (1/2), 9-33.

- Mitchell, J., Finkelhor, D., & Wolak, J (2001). Risk Factors for and Impact of Online Sexual Solicitation of Youth. *Journal of the American Medical Association*, 285 (23): 3011-3014.
- Mitchell, J., Finkelhor, D., & Wolak, J.(2007). Does online harassment constitute bullying? An exploration of online harassment by known peers and online-only contacts. *Journal Adolescent Health*. 41 (6), 51-58.
- Mitchell, J., Finkelhor, D., & Wolak, J.(2007a). Trends in youth reports of sexual solicitations, harassment & unwanted exposure to pornography on the internet. *Journal Adolescent Health*. 40 (2), 116-126.
- Molnar, A. (1997). Computers in education: a brief history. *T H E Journal*. (24) 11. 63.
- Moreno, M., (2010). Social networking sites and adolescents. *Paediatrics Annals*, 39 (9), 565-568.
- Mullamaa, K., (2010). ICT in Language Learning- Benefits and Methodological Implications. *International Education Studies*. 3 (1) 38-
- Neuendorf, K. (2002). *The Content Analysis Guidebook*. California: Sage.
- O'Reilly, D., & O'Neil, C. (2008). An analysis of Irish primary school children's internet usage and the associated safety implications. *International Journal of information and Communication Technology Education*. 4 (3), 40-48.
- Packiam Alloway, T., Horton, J., Alloway, R. and Dawson, C. (2012). Social networking sites and cognitive abilities: do they make you smarter?. *Computers & Education*. (63). 10-16.
- Park, S., Kim, J & Cho, C. (2008). Prevalence of internet addiction and correlation with family factors among south korean adolescents. *Adolescence*. 43 (172), 895-909.
- Patchin, J. & Hiduja, S. (2010). Trends in online social networking: Adolescent use of myspace over time. *Media Society*. 12 (2), 197-216.
- Potter, R., & Potter, L. (2001). The internet, cyberporn, and sexual exploitation of children: Media moral panics and urban myths for middle-class parents? *Sexuality and Culture*. 5 (3). 31-48.
- Potter, J. & Weatherell, M. (1993). A model of discourse in action: Identity-mind-reality: some ontological communication. *American Behavioral Scientist*. 36 (3). 383-401.
- Prensky, M. (2001). Digital natives, digital immigrants: do they really think differently? On the Horizon, 9(6), 1-6.

- Pujazon, M., & Park, J. (2010). To tweet, or not to tweet: Gender differences and potential positive and negative health outcomes of adolescents' social internet use. *American Journal of Men's Health*. 4 (1) 77-85.
- Queensland Government (2011). Smart Classroom web page. Retrieved February 2, 2011 from <http://education.qld.gov.au/smartclassrooms/>
- Rigby, K. (1997). What children tell us about bullying in our schools. *Children Australia*, 22 (2) 28-34.
- Rittakertta-Heino, K., Rimpela, M., Marttunen, M., Rimpela, A. & Rantanen, P. (1999). Bullying, depression and suicidal ideation in Finnish adolescents: school survey. *BMJ journals*, 319 (7) 319-348.
- Rogers, M., Taylor, B., Cunning, D., Jones, M & Taylor, K. (2006). Parental restrictions on adolescent internet use. *Paediatrics*. 1804.
- Rohloff, A. & Wright, S. (2010). Moral panic and social theory: beyond the heuristic. *Current Sociology*. 58 (3). 403-419. doi: 10.1177/0011392110364039
- Rosen, L., Cheever, N., & Carrier, M. (2008). The association of parenting styles and child age with parent limit setting and adolescent myspace behaviour. *Journal of applied Developmental Psychology*. 29 (6). 459-471.
- Smith, E. (2010). Underachievement, failing youth and moral panics. *Evaluation & Research in Education*. 23 (1), 37-49 doi 10.1080/09500791003605102
- Steeves, V. & Webster, C. (2008). Closing the barn door: the effect of parental supervision on Canadian children's online privacy. *Technology & Society* 28. (1). 4-19.
- Steinfeld, C, Ellison, N & Lampe, C. (2008). Social capital, self-esteem, and use of online social network sites: a longitudinal analysis. *Applied Developmental Psychology* 29. (6). 434-445.
- Straker, L., O'Sullivan, P., Smith, A. & Perry, M (2007). Computer use and habitual spinal posture in Australian adolescents. *Public Health Reports*. 122 (5), 634-643.
- Subrahmanyam, K., Smahel, D., & Greenfield, P. Zheng. (2006). Connecting developing construction to the internet: identity presentation and sexual exploration in online teen chat rooms. *Developmental Psychology*, 42. 395-406.
- Sunday Mail. (2012, Jan 15). Attack on web India targets giants. *Sunday Mail*, p.42.
- Sunday Mail. (2012, May 20). Counting the Cost- 'Porn' Kids in counselling, *Sunday Mail*, p.29.

- Sunday Mail. (2011, Jun 12). Experts warn of DIY tatt danger, *Sunday Mail*, p13.
- Sunday Mail. (2011, Jul 15). Internet addiction a no-brainer, *Sunday Mail*, p. 5.
- Sunday Mail. (2012, Jan 15). It's criminal secrets slip through the net, *Sunday Mail*, p. 47.
- Sunday Mail. (2012, May 6). Kids Corrupted In Smut-Phone Age-Primary Children Viewing Sex Films, *Sunday Mail*, p.10.
- Sunday Mail. (2012, Jun 3). Kids death in chocking craze, *Sunday Mail*, p.5.
- Sunday Mail. (2011, Jul 3). Kids risk death in chocking craze, *Sunday Mail*, p.22.
- Sunday Mail. (2012, Jun 10). Loaded Lament-Lads' mag boss 'sorry' for porn, *Sunday Mail*, p.4.
- Sunday Mail. (2012, Mar 25). Net cast too wide- Schools cut off from most sites, *Sunday Mail*, p.25.
- Sunday Mail. (2012, Jan 22). Newt surges as attack backfires, *Sunday Mail*, p.46.
- Sunday Mail. (2012, Jun 3). Parents tangle with web issues, *Sunday Mail*, p.31.
- Sunday Mail. (2012, Jun 3). Prey in a devil's playground- moshlings not the only monsters as predators target kids online, *Sunday Mail*, p.10.
- Sunday Mail. (2012, May 20). Raising good cyber citizens, p.22.
- Sunday Mail. (2012, Mar 25). Richer kids prone to more online risk, p.22.
- Sunday Mail. (2011, Sep 25). Schools 'left behind'- state on wrong side of digital divide, p.14.
- Sunday Mail. (2012, Jun 3). The stranger-danger chat: A balanced approach, p.24.
- Sunday Mail. (2012, May 13).Tug of war for kids in social media- Online posts ruled out for use in courtroom custody disputes, p.26.
- Sunday Mail. (2011, Oct 2).Web crims target kids-Identity details stolen from social networks, *Sunday Mail*, p.9.
- Sunday Mail. (2012, May 6).Who should be the gatekeeper, *Sunday Mail*, p.11.
- Swinarski, M., Parente, D., & Noce, K. (2010). A study of gender differences with respect to internet socialization of adolescents. *Journal of Business & Economics Research*. 8 (6), 23-30.
- Tait, S. (2008). Pornographies of violence? Internet spectatorship on body horror. *Critical Studies in Media Communication*. 25 (1), 91-111
doi: 10.1080/15295030701851148oral

- Thomas, S. (2005). *Education policy in the media Public Discourses on Education*. Moorooka:Watson Ferguson & co.
- Thompson, K. (1998). *Moral Panics*. London: Routledge.
- Valkenburg, P., & , Jochen, P. (2009). Social consequences of the internet for adolescents. *Current Directions in Psychological Science*. 18 (1), 1-5. doi:10.1111/j.1467-8721.
- Van den Eijnden, R., Spijkerman, R., vermulst, A., Van Rooij, T., & Engels, R. (2010). Compulsive internet use among adolescents: bidirectional parent-child relationships. *Journal Abnormal Child Psychology*. 38, 77-89. doi: 10.1007/s10802-009-9347-8
- Walsh, S., White, K. & Young, R. (2008). Over-connected? A qualitative exploration of the relationships between Australian youth and their mobile phones. *Journal of adolescence*. 31 (1), p77.
- Walker, J. (2005). Teens in distress series: adolescents stress and depression. *University of Minnesota* Retrieved May 7, 2007 from University of Minnesota from <http://www.extension.umn.edu/distribution/youthdevelopment/DA3083.html>.
- Wang, R., Bianchi, S., & Rapley, S. (2005). Teenagers' internet use and family rules: a research note. *Journal of Marriage and Family*. 1249-1258.
- Warden, N., Phillips, J., & Ogloff, J. (2004). Internet addiction. *Psychiatry, psychology & Law*. 11 (2), 280- 295.
- Weatherell. M., Taylor. S., Yates. (2004). *Discourse Theory and Practice*. Great Britain. Cromwell Press Limited.
- Williams, A. (2003). Adolescents' relationship with parents. *Journal of Language and Social Psychology*. 22 (1) 58-65.
- Wilson, V. (2011). Research methods: content analysis. *Evidence Based Library and Information Practice*. 6 (4). 177- 179.
- White, G. (2008). ICT trends in education. Retrieved September 20, 2011 from Electronic Book Library database.
- White, M. (2006). Content Analysis: a flexible methodology. *Library trends* 55 (1), 22-45.
- Wolak, J., Finkelhor, D., & Mitchell, K. (2004). Internet-initiated sex crimes against minors: Implications for prevention based on findings from a national study. *Journal of Adolescent Health*, 35 (5), 424.e11-424.e20.

- Ybarra, M., Diener-West, M. & Leaf, P. (2007). Examining the overlap in internet harassment and school bullying: Implications for school intervention. *Journal of adolescent Health*, 41 (6), 42-50.
- Ybarra, M., Mitchell, K., Wolak, J., Finkelhor. (2006). Examining characteristics and associated distress related to internet harassment: findings from the second youth internet safety survey. *Pediatrics*. 118 (4), 1169-1177, doi: 10.1542/peds.2006-0815
- Youn, S. (2008). Parental influence and teens' attitudes toward online privacy protection. *The Journal of Consumer Affairs*. 42 (3), 362-388.
- Zajdow, G. (2008). Moral panics: the old and the new. *Deviant Behaviour*. 29 (7). 640-664. doi: 10.1080/01639620701839476.

Appendix

Appendix A -

Appendix B -

Appendix C -

Appendix D -

Appendix A

Grieving parents warn of deadly internet fad

Section: News Edition: 6 - Late City

A "CHOKING game" being played by teenage thrillseekers has claimed the life of a Gold Coast schoolgirl.

Abigail Corthals, 15, was found dead in her bedroom this month with a belt around her neck. Now, her grief-stricken parents want to warn others about the dangerous internet-inspired fad which has reportedly killed dozens of American teens and has now spread to Australia.

"This is a parent's worst nightmare and we don't want it to happen to anyone else," Abigail's father Michael Corthals said yesterday.

Mr Corthals and his wife, Francoise, found their daughter slumped against her bed on October 3. Frantic efforts to revive her failed.

They initially thought she had committed suicide but police found text messages on her phone and in her MSN account which indicated she had been playing the "choking game" - also known as the "black-out" or "knock-out" game.

The game, which is reportedly being played in schoolyards and at teen parties, involves young people asphyxiating each other or themselves to achieve a high. The choking produces a brief feeling of euphoria by depriving the brain of oxygen.

Mr and Mrs Corthals said their daughter was a normal, happy teen and dedicated private school student who liked to spend time in her room on her computer.

They said she was also an "adrenalin junkie" who had skydived, climbed the Sydney Harbour Bridge and planned to go bungy jumping in New Zealand on her 16th birthday.

The Corthals said they had never heard of the "choking game" before their daughter's tragic death.

"If we had heard of it, we would have spoken to Abigail about it and told her 'we hope you're not doing anything that stupid'," a tearful Mrs Corthals said.

The couple found an MSN message indicating their daughter planned to end the game, telling a friend: "We have to stop this now."

"She obviously did it for one last thrill," Mr Corthals said.

"Kids think they are invincible and she didn't realise that the thrill could kill her. It's a silent killer too. There was no warning. Abigail even left her bedroom door open while she was doing it."

The Corthals urged other parents to discuss the "choking game" with their children and warn them of the dangers.

"Parents have to be aware and open with their children," Mrs Corthals said.

Griffith University suicide expert Professor Diego De Leo said many young people flirted with suicide-like, high-risk behaviour such as self-asphyxiation to impress or compete with peers.

"It's extremely dangerous," he said. "People are under the impression that they can control and dominate their reactions which is badly wrong."

© News Limited Australia. All rights reserved.

Source: Courier Mail, The (Brisbane), Oct 27, 2011, p3, 1p
Item: 201110276003007110

Appendix B

KIDS CORRUPTED IN SMUT- PHONE AGE- Primary children viewing sex films

-
- ``Many children have the internet in their pocket, they have it on the bus, at lunch, in their bedrooms, bathrooms"
SECURITY EXPERT JOHN FISON
THEY are Generation XXX. Schoolchildren as young as 11 are spending up to 10 hours a day watching explicit adult material as new technology sneaks pornography into their pockets.
Experts have warned of an increase in porn addiction in children as a new generation wired to smartphones and laptops have 24-hour access to hardcore material.
Australian addiction specialist Robert Mittiga said the explosion in mobile technology had led to a surge in numbers of children dealing with porn addiction.
Preliminary findings of new Australian research indicates that 43 per cent of regular pornography users were first introduced to explicit images between the age of 11 and 13.
Mr Mittiga said some porn merchants were targeting kids by making pornography featuring cartoon and children's book characters.
Mr Mittiga said he had personally treated children as young as 14 for porn addiction and some young addicts spent up to 10 hours a day viewing explicit material.
``It's so accessible, that's the problem, and we don't have enough security or barriers," he said.
Mr Mittiga said children were now watching pornography at school and sharing files with other students.
He said children were 10 times more likely to get hooked on explicit material than adults, and their addiction could escalate into criminal acts.
Mr Mittiga said some of his young patients had stolen credit cards to fuel their addiction and racked up bills of up to \$9000 on pornography sites and phone sex lines. Recently it was reported that a Gold Coast bus driver abandoned a bus full of students after they allegedly shared porn images on their mobiles and were verbally abusive. A statement from the Department of Education claims that CCTV footage shows the students were not behaving badly.
The growing problem in Australia comes at a time when Labour ministers in the UK have thrown their weight behind a campaign for an automatic block on online porn, advocating an ``opt-in" system, under which access is blocked unless adults specifically declare they want to see sexual content.
Brisbane online security expert John Fison of Netbox Blue said children between seven and 17 were at high risk of becoming victims of inappropriate online behaviour. ``Many children have the internet in their pocket, they have it on the bus, at lunch, in their bedrooms, bathrooms," he said.
Mr Fison said education and technological enforcement policies needed to be reviewed every six months. and claimed many web-filtering solutions are out of date and students get around them easily.
The Department of Education said schools' mobile phone and electronic equipment

policy had most recently been updated in February 2011.

Queensland Teachers' Union president Kevin Bates said that although schools were responding to the challenge of smartphones, students were ahead of the curve. He said parents, teachers and the community needed to work together to give students the skills they needed to navigate the internet, and use technology safely.

But Dr Alan McKee, who leads the Queensland Government's Developing Improved Sexual Health Education Strategies grant, emphasises the importance of parents being a central part of their children's sexual education.

"If a pre-pubescent child stumbles across sexually explicit material - whether it's an abandoned magazine or photos on a smartphone - it won't harm them," he said.

"All of the research shows that they're most likely to get embarrassed, laugh, and move on to something that actually interests them. The most important thing is for parents to build open communication with their children about sex so that if your child does encounter something that upsets them online they know they can come to you and talk about it and you won't get angry."

Mr Bates said that while sex education in schools had come a long way, teachers' hands were often tied.

"Schools could provide in-depth and detailed programs of sex education but tend to be in many ways bound by community standards and expectations," he said.

THE NUMBERS

9000 dollars spent by Australian youth on sex lines and pornography

43 percentage of regular pornography users that started aged 11 to 13

10 children 10 times more likely to get hooked on porn than adults

70 percentage of parents who didn't know children had accessed adult material

10 hours per day some young people spend watching porn

90 percentage of Australians predicted to own smartphone by 2015

39 percentage Australian youths who access porn due to "curiosity"

19 percentage of young people who access porn because it's "cool"

WHAT PARENTS CAN DO

Tips from Queensland Police

Be aware of the programs and files on your computer

Check out the Family Internet Safety Agreement, developed by Taskforce Argos, at www.police.qld.gov.au

Consider installing filtering software.

Look for them at www.netalert.gov.au

Check the safety measures in place at your child's school or public library

Tips from a sex education expert

Download the guide Talk Soon, Talk Often <http://tinyurl.com/3bw7cu2>

Don't be afraid to talk to your children about sex. Answer questions honestly and simply, whatever age

Tips from psychologist

Be on the alert for children spending more and more time in front of the PC, laptop or mobile

Be wary of a marked reduction in other activities

Are they secretive about spending habits? Do they skip school, university and meals?

Watch out for low mood, social isolation, looking over-tired

Tips from a technology expert

Don't give children smartphones

Remove phone from child before bed or homework
Introduce filters

© News Limited Australia. All rights reserved.

Source: Sunday Mail, The (Brisbane), May 06, 2012, p10, 1p
Item: 201205062010804238

Appendix C

Web crims target kids - Identity details stolen from social networks

Section: News Edition: 2 - State - Main Country

FRAUD experts are calling for internet security to be taught in schools amid fears children's identities are being stolen.

Children are the new targets for organised crime gangs because they share too much about their personal lives on social networking sites.

A child who posts basic details about their lives on Facebook, such as their date of birth, school, name, email and photographs, are providing enough data for a criminal to apply for a credit card, loan or documents in the child's name when they turn 18.

Parents are urged to teach children online safety the same as they would teach them to use a knife and fork or how to cross the road.

Queensland fraud squad Superintendent Brian Hay said crooks were using computer programs to harvest huge quantities of information from young people, who gave too much away on social media sites, creating detailed profiles ready for use when the individual became an adult.

He expected identity theft of young people would become a major problem in the next few years as youths targeted long ago came of age.

The information is of major value to organised crime gangs, who can use the information to fraudulently obtain credit cards when the time comes.

"A child of 13 today may have nothing," Supt Hay said.

"But if the crooks have their details they know when they are going to turn 18," he said.

"So when the child in five years time turns 18 it may well be the case they now have a credit card they didn't know about.

"The failing is where we don't have the education and awareness programs in place.

"We know the crooks out there are harvesting identity data, we know they build search kits and search engines to profile individuals out of all that data and we know that they can value add to their financial products."

The topic will be discussed at the Identity and Hi-Tech Crime Symposium on the Gold Coast from Tuesday to Thursday.

Cyber-bullying expert Dr Michael Carr-Gregg said internet safety should be taught in schools.
fraserk@qnp.newsltd.com.au

Appendix D

LOADED LAMENT - Lads' mag boss 'sorry' for porn

Section: News Edition: 2 - State - Main Country

THE longest-serving editor of lads' mag Loaded has confessed fatherhood has made him bitterly regret turning a generation on to porn. Martin Daubney said before he became a father the job was "harmless fun, dictated by market forces". "We were normalising soft porn, and in so doing we must have made it more acceptable for young men to dive into the murky waters of harder stuff on the internet. I have a haunting sense of regret," he said.